

# WL380

## MANUAL



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## WL380 MANUAL

Congratulations on your choice of the *Waterlogic WL380 Water Purification System* which includes:



*Advanced Filtration Technology*



*BioCote<sup>®</sup> Anti-Microbial Surface Protection*



*Firewall<sup>™</sup> Advanced Water Purification*

The *Waterlogic WL380 Water Purification System* provides exceptional quality and great tasting water with every use.

## INTRODUCTION

Carefully read and follow all instructions to ensure proper and efficient operation of your *Water Purification System*. Contact *Waterlogic* or an *Authorized Waterlogic Dealer* if you have any questions.

*Waterlogic* and *Authorized Waterlogic Dealers* employ trained service personnel who are experienced in the installation, function and repair of *Waterlogic* equipment. This publication is written for use by these qualified individuals. *Waterlogic* encourages users to learn about products, however, we believe that product knowledge and service is best obtained by consulting *Waterlogic* or an *Authorized Waterlogic Dealer*.

*Waterlogic Water Purification Systems* should be combined with selected water treatment components to create a system specifically tailored for each application by trained and qualified personnel.

Products manufactured and marketed by *Waterlogic* and its affiliates are protected by patents issued or pending in the United States and other countries.

*Waterlogic* reserves the right to change the specifications referred to in this literature at any time, without prior notice. Changes or modifications not expressly approved by *Waterlogic* could void the warranty and user's authority to operate the equipment.

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## **SAFETY ALERT SYMBOLS**

Read and follow all safety information carefully. The signal words used in this manual are selected as shown below and based on an assessment of the degree of potential injury or damage (severe or minor) and the occurrence of injury (definitely occurs or has the potential to occur) when the warning is ignored:

- ⚠ DANGER!** *Indicates a situation which, when not avoided, results in death or severe injury.*
- ⚠ WARNING!** *Indicates a situation which, when not avoided, has the potential to result in death or severe injury; and/or severe property damage.*
- ⚠ CAUTION!** *Indicates a situation which, when not avoided, results or has the potential to result in minor injury; and/or minor property damage.*

## **SAFETY PRECAUTIONS**

### **Basic safety precautions should be followed, including the following:**

Ensure all local, state, and federal laws and codes including health and safety guidelines are met when installing **Waterlogic** Equipment. Only qualified service technicians should attempt installation and service of **Waterlogic** Equipment. Always read the entire operating instructions before using the appliance and save these instructions for future use.

- ⚠ DANGER!** *This product can cause death or severe injury if incorrectly operated, installed or maintained. The installation, maintenance, sanitizing and any repair must be performed by qualified persons trained by Waterlogic International or their approved distributors only. Do not remove any panel or cover to protect against electrical shock and exposure to UV radiation.*
- ⚠ DANGER! ELECTRICAL SHOCK HAZARD.** *Always use a dedicated and properly grounded outlet. Unit should be protected by ground-fault circuit interrupter (GFCI) or residual current device (RCD) having a rated residual operating current not exceeding 30mA. Use only Waterlogic supplied power cord. Never use extension cords or power strips to connect unit. Do not use if the power supply cord is damaged. Always unplug from power supply prior to servicing.*
- ⚠ WARNING! AUTHORIZED USE ONLY.** *This appliance is to be used for its intended purpose as described in this manual and untrained individuals who use this manual assume the risk of any resulting property damage or personal injury. This appliance can't be used by children and persons with reduced physical, sensory or mental capabilities or lack of experience.*
- ⚠ WARNING! UV-C EMITTER (UV LAMP).** *This appliance contains a UV-C emitter (UV Lamp). UV-C radiation may, even in little doses, cause harm to the eyes and skin. Unintended use or damage to the housing may result in the escape of dangerous UV-C radiation. Never operate the UV-C emitter if damaged or removed from enclosure. Do not touch or look directly into the faucet.*
- ⚠ WARNING! DO NOT OPERATE IF DAMAGED.** *Unplug and isolate water supply if abnormal conditions exist. Contact Waterlogic or authorized dealer for repair, service, and installation to avoid hazards.*

- ⚠ WARNING! HOT WATER.** *Unit produces Hot Water in excess of 87°C (188°F). Water above 82°C (125°F) can cause severe burns or scalding. Keep unauthorized people and children away from the unit to avoid accidental dispensing of hot water.*
- ⚠ WARNING! CONNECT TO POTABLE WATER SUPPLY.** *This system is to be used for water only and is not intended for use where water is microbiologically unsafe or with water of unknown quality without adequate disinfection before or after the system.*
- ⚠ WARNING! TIP HAZARD.** *Dispenser could tip or fall causing serious injury. Always install unit on a firm, flat, and level surface and secure the **WL380 Water Treatment System** to the base cabinet with the screw provided to lock the components together. Secure unit to cabinet, wall, or floor if needed. Never place heavy items on top of unit and never climb, stand, or hang on unit or storage cabinet to prevent injury and damage.*
- ⚠ WARNING! UNIT IS HEAVY. TWO PERSON LIFT REQUIRED.** *Transport unit empty and always use material handling equipment or two people with proper lifting technique to reduce injury risk.*
- ⚠ WARNING! STORE AND TRANSPORT UNIT EMPTY. ALWAYS SANITIZE BEFORE USE.** *The unit must be completely drained and sealed before storing to avoid stagnation and reduce microbiological contamination (potential bacterial growth). Sanitize before use to eliminate any potential microbiological contaminants*
- ⚠ CAUTION! INDOOR USE ONLY.** *Intended for Household Use. Never expose to direct sunlight, heat sources, or ambient air temperature above 37°C (100°F) or below 2°C (35°F). Install indoors and keep unit away from excessive humidity. Never expose to freezing temperatures. Ensure there is adequate clearance around the unit to allow refrigeration system condenser to dissipate heat. Warmer environments require more clearance around the unit. Minimum clearance around all surfaces of the machine is 2-inches. Installs where the ambient temperature exceeds 27°C (80°F), require a minimum of 4-inches clearance for proper heat dissipation and efficient operation.*
- ⚠ CAUTION! USE A WATER PRESSURE REGULATOR.** *Waterlogic will not be responsible for injury or damage caused by excessive water pressure. Input or feed pressure must be 40 psi to 60 psi. Be aware of any potential pressure surges caused by building/municipal pumping stations.*
- ⚠ CAUTION!** *Feed the unit with a potable ambient or cold water supply only. Feed water over 37°C (100°F) can damage the treatment components. Water block devices and external leak detectors are strongly recommended. Locate the unit as close to the water supply and the electrical connections as possible. Locate the unit as close to the water supply and the electrical connections as possible. Immediately isolate or close water supply valve and contact service representative if leak is noticed.*

**Contact Waterlogic for assistance or help finding an Authorized Service Representative.**

## **WL380 FEATURES AND BENEFITS**

### **Firewall™ UV Purification**

Firewall proprietary technology purifies outgoing water at the point-of-dispense. Firewall keeps the dispense nozzle free from external contamination as well as purifying the outgoing water, making the safest water possible every single dispense.



### **Cold, Ambient, Hot, Extra Hot Water Options**

Cold water set point is adjustable to meet a wide range of customer demands. High capacity 4.0 Liter stainless steel cold tank and 1.6 Liter thermistor controlled stainless steel hot tank.

### **High Performance Filtration**

Advanced NSF / ANSI 53 Certified Carbon Block Filtration with Lead and Cyst Removal included. Inline filter features infused BioCote protection and eco-friendly replacement cartridge to minimize waste.

### **BioCote® Anti-Microbial Protection**

Certain plastic, silicon, and painted surfaces surrounding the dispensing areas and drip tray are infused with an exclusive additive called BioCote®. BioCote® provides an effective barrier against microbes like bacteria and mold, which may cause odors or staining.



### **Large Dispense Area with Recessed Sanitary Faucet**

Increased dispense height to accommodate large vessels. Intuitive recessed dispense area with smooth cleanable surfaces.

### **Removable BioCote® Drip Tray**

Drip tray features a two-piece design for easy cleaning, BioCote® protection, and an optional drain port.

### **Leak Detection System**

Leak detection system includes bottom catch panel with leak detection sensor that will alarm user and shut off inlet solenoid valve in case of internal leak.

### **Customizable Programming**

Settings for optimizing each **WL380** include; Adjustable Cold Temp Set Point, Energy Saver (Heater Sleep) Mode, and ability to convert from Cold/Hot to Cold/Ambient Unit.

### **Intuitive User Interface with Modern Capacitive Touch Screen**

Single touch dispense with lighted controls provide visual feedback to user of actions and status.

### **Child Safeguard**

Select and hold two icons simultaneously for 2 seconds to prevent accidental dispensing of hot water.

### **Advance Self-Diagnosis System with LED Status Indicators**

Internal monitoring system with light emitting diode (LED) status indicators improves user experience and diagnostic functionality.

### **Energy Saving Sleep Mode**

Every unit comes with energy saving sleep mode active that will turn the heater off after 3 hours of inactivity. Unit can be programmed to disable sleep mode and leave heater active at all times.

## CERTIFICATIONS

*Waterlogic Water Purification Systems* have been tested, and certified to rigorous NSF and UL Standards. We believe that performance testing and certifications validate **Waterlogic** as a world-leader in water treatment systems.

### [WL380 Water Treatment System Certifications Include](#)



#### UL399 – Certified Drinking Water Cooler

Intertek Labs (ETL) Certified the **WL380** Water *Treatment System* to ANSI/UL 399 Standard for Drinking Water Coolers.

**Intertek**

CSA C22.2 No. 120 CSA Standard for Refrigeration.



**BPA Free** - **Waterlogic** tests for BPA and declares that all of its products are Bisphenol-A FREE and contain no harmful BPA plastics.

Water Quality Association (WQA) is and International Standards Organization.



#### NSF/ANSI-53 Lead and Cyst Reduction

#### NSF/ANSI-55 Class A – Ultraviolet Microbiological Water Treatment Systems

#### NSF P231 – Protocol for Microbiological Purifiers

The **Waterlogic Firewall™** components have been tested and certified by the WQA to NSF/ANSI-55 Class A – Ultraviolet Microbiological Water Treatment Systems, and to NSF P231 and USEPA Standard for Microbiological Water Purifiers.

The Public Health and Safety Organization establishes minimum requirements for health and sanitization characteristics of microbiological water purifiers. The requirements are based upon the recommendations of the US Environmental Protection Agency's (USEPA) Task Force Report.

### [Safe Drinking Water Act](#)

**Waterlogic** water treatment systems conform to the Safe Drinking Water Act (SWDA) "lead-free" amendment effective January 4, 2014, and **Waterlogic** has tested for BPA and declares that all of its products are Bisphenol-A FREE and contain no harmful BPA plastics.

**Waterlogic** is certified to ISO 9001:2015 – Quality Management Systems (certified by Intertek). ISO 9001 is the internationally accepted standard for well managed organizations that have adopted the key quality management principles to its operations to bring consistent quality products and a culture of continuous improvement.



## WL380 MODEL/PART DESIGNATIONS

BRAND NAME	DESCRIPTION	MODEL - PART NUMBER
<i>WL380</i>	<i>WL380</i> Cold, Ambient, Hot, Extra Hot F-3FW-FS-HCA-TT-BL-WLU / Serial # Prefix <u>83</u>	WL380

## SPECIFICATIONS

<u>ITEM</u>	
Water Connection	¼" Quick Connect
Cold Water Temperature	41° F (5°C) Factory Set Point Adjustable Thermostat Range: 35°F (2°C) to 46°F (8°C)
Cold Tank Size	4.0 Liter
Hot Water Temperature	87°C (189°F) Factory Set Point
Extra Hot Water Output	95°C (203°F) Factory Set Point
Hot Tank Size	1.6 Liter Stainless Tank
Hot Water Manual Reset Overload	105°C (221°F)
Recommended Incoming Feed Pressure	40-60 psi (275-414 kPa) – Use Pressure Regulator
Maximum Service Pressure	100 psi (689 kPa) – Use Pressure Regulator
Rated Service Flow Out	1.89 Liters per Minute (0.5 Gallons per Minute) – Firewall Purification
Environmental Temperature	2°- 37°C (35°- 100°F)
UV Lamp	13 Watts
Heater	500 Watts
Refrigerant Gas	R134a, 2.12 ounces (0.06 kg)
R134a Pressures	High (230 psi), Low (90 psi)

\*See Filter Performance Data Sheet for NSF/ANSI 53 Specifications



### WL380 SHIPPING SPECIFICATIONS

<u>ITEM</u>	<u>WL350 Machine</u>	<u>WL350 Box</u>
Width/Depth/Height	385 mm x 460mm x 1140mm 15.2" x 17.5" x 45"	470 mm x 445 mm x 1245 mm 18.5" x 17.5" x 49"
<u>Dry Weight</u>		29.5 kg 65 pounds

Unit itself weighs 29.5 kg – what does the box weigh? Look at the numbers and see the comparison between unit and box – backout the package weight to determine.

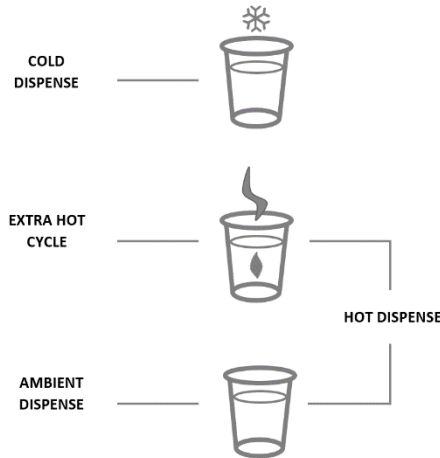
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### WL380 ELECTRICAL SPECIFICATIONS

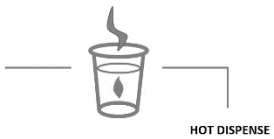

<u>ELECTRICAL SUPPLY</u>	<u>AC 120V/60HZ, 1 PHASE</u>	<u>15 Amp Service Required</u>
<u>COMPONENT</u>	<u>POWER (approximate)</u>	<u>DRAW (approximate)</u>
Heater	500 Watts	4.17 Amps
Compressor	156 Watts	1.3 Amps
Controls	18 Watts	0.15 Amps
Firewall UV System	13 Watts	0.11 Amps
<b>WL380 TOTAL</b>	<b>687 WATTS</b>	<b>5.7 AMPS</b>

## OPERATING INSTRUCTIONS

**⚠ WARNING!** *HOT WATER can cause severe burns or scalding. Unit produces Hot Water (189°F / 87°C). Keep unauthorized people and children away from the unit to avoid injury and accidental dispensing.*




<b>COLD DISPENSE</b> 	<p><b>Cold Dispense</b></p> <p>Select Cold Dispense icon until it lights and hold until desired amount is dispensed.</p> <p>Release to stop dispense.</p>
<b>AMBIENT DISPENSE</b> 	<p><b>Ambient Dispense</b></p> <p>Select Ambient Dispense icon until it lights and hold until desired amount is dispensed.</p> <p>Release to stop dispense.</p>
<p><b>Cold and Ambient Dispense:</b> There will be a 2 second initial delay as Firewall purifies ambient water and sanitizes the faucet. Ambient will only dispense if Firewall is active to guarantee safest possible water. Ambient icon and Firewall Purification Light are disabled if Firewall is inactive. One minute continuous dispense limit.</p>	

<p>EXTRA HOT CYCLE</p>  <p>HOT DISPENSE</p> <p>AMBIENT DISPENSE</p> 	<p><b>Hot or Extra Hot Dispense</b></p> <p>Select HOT (middle) and AMBIENT (lower) icons together until both light. Hold until desired amount of Hot Water is dispensed.</p> <p>Release to stop dispense.</p>
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Icons must be held simultaneously for 2 second before Hot Water will dispense. This delay is a safeguard to prevent accidental dispense or unauthorized use.

**NOTE:** Hot water may not be immediately available if unit is in energy saver mode. Select any icon to “wake up” or reactivate heater and wait a few minutes for hot water to be produced.









<p>EXTRA HOT CYCLE</p> 	<p><b>Hot or Extra Hot Dispense (Raises Hot Tank to Elevated Temperature for Tea and Soup)</b></p> <p>Select EXTRA HOT CYCLE icon until it lights and hold for 2 seconds then release. The icon will flash indicating the extra hot cycle is activated. Icon will continue to flash while water in hot tank heats to extra hot set point (default 203oF = 95oC). Flashing will stop once tank has reached extra hot set temperature (typically a minute or two). Extra hot water can now be dispensed per instructions above.</p>
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**NOTE:** Icons will light when depressed to validate selection. A soft touch is all that is required. A one minute continuous dispense timeout is built in as safeguard. Release and reapply to override.

## USER INTERFACE

The **WL380 Water Treatment System** provides user reassurance of key functional elements with 4 lights illuminate green to indicate total purification security.



  <b>Power</b>	<p><u>Power Light</u> – Indicates ON/OFF Status.</p> <p>Light flashes with audible alarm when leak detected.</p>
  <b>Filtration</b>	<p><u>Filtration Light</u> – Indicates Filtration Present.</p> <p>No filter timer or flow-counter function.</p>
  <b>Purification</b>	<p><u>Firewall Purification Light</u> – Indicates Firewall Status.</p> <p>Firewall UV is active with green lit and inactive when off.</p>
  <b>Protection</b>	<p><u>BioCote® Protection Light</u> – Indicates BioCote® Present.</p> <p>Antimicrobial Surface Protection</p>



## **WATERLOGIC MANUFACTURED WATER TREATMENT SYSTEM LIMITED WARRANTY** **UNITED STATES AND CANADA ONLY**

*Waterlogic water treatment systems are guaranteed to the original purchaser to be free of defects in materials and workmanship for a period of three (3) years from the date of purchase, but in no event longer than forty-eight (48) months from the date of manufacture. Waterlogic Commercial Products, LLC (“Waterlogic”) based in the U.S.A. and its affiliated companies are not liable for any cost of removal, installation, transportation, or any other charges which may arise in connection with a warranty claim.*

*This warranty does not cover damage or wear to products caused by abnormal operating conditions, accident, abuse, misuse, unauthorized or improper alteration or repair, damage caused by or resulting from shipping or accident, damage caused by hot water, freezing, flood, fire, or acts of God. The effects from chlorine corrosion, scaling and normal wear are specifically excluded from this warranty. This warranty does not cover products used outside the countries where the unit was purchased, and does not cover products that were not installed in accordance with Waterlogic printed installation and operating instructions obtained in training or from [www.waterlogic.us](http://www.waterlogic.us). Failure to follow all instructions for operation and maintenance voids the warranty. This warranty is not transferable.*

*To obtain warranty repairs or replacement, you must obtain a Return Authorization from Waterlogic. To obtain a Return Authorization, you must submit a Return Authorization form with supporting documentation to Waterlogic for evaluation. The form is available at [www.waterlogic.us](http://www.waterlogic.us). Supporting documentation must include, but is not limited to; proof of purchase, installation date, failure date, and supporting installation and maintenance data. After you submit a Return Authorization form and supporting documentation, Waterlogic will determine whether a reasonably apparent defect in materials or workmanship covered by this limited warranty exists. If Waterlogic determines the claimed defect is covered by this warranty, Waterlogic will, at its sole discretion, determine whether to correct the defect or replace the unit, free of charge to you. If Waterlogic determines that the unit should be returned for warranty service, Waterlogic will approve of return in writing and will issue a Return Authorization which you must obtain prior to shipping the product. You are responsible for the cost of freight in to Waterlogic.*

*Waterlogic and its affiliated companies hereby limit the duration of any and all implied warranties to a maximum period of three (3) years from the date of purchase including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. Consequential and incidental damages are not recoverable under this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.*

*This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.*

**Waterlogic Commercials Products LLC**  
3175 Bass Pro Drive  
Grapevine, TX 76051

**Tel:** (800) 288-1891  
**Website:** [waterlogic.us](http://waterlogic.us)

## SERVICE REQUIREMENTS

**⚠ WARNING!** *Read and understand the contents of this manual before attempting to service WL380. Failure to follow the instructions in this manual could result in death, serious personal injury, or severe property damage. Only trained and qualified technicians should attempt to install, maintain, or service Waterlogic Equipment.*

1. Visually inspect all electrical and water connections for signs of wear or damage.

**⚠ DANGER!** *HIGH VOLTAGE ELECTRICAL HAZARD. Always unplug before inspection and service.*

2. **Waterlogic** recommends changing the UV Lamp (CT-2090) every 6 months under normal single shift usage. The lamp may require more frequent changes if placed in high volume/multi-shift environment. Contact Waterlogic for specific recommendations.

**UV DECLARATION:** The UV Lamp in this appliance conforms to the applicable provisions in the Code of Federal Regulations(CFR) requirements including; Title 21, Chapter 1, Subchapter J, Radiological Health.

**⚠ WARNING!** *ULTRAVIOLET RADIATION. Protect your skin and eyes against ultraviolet rays. Never look directly at an operating UV light in the faucet. Disconnect before removing UV Lamp.*

3. Clean the quartz spiral that surrounds the UV lamp with a non-abrasive cloth, descaling solution, or ultrasonic bath if needed when changing UV lamps. Inspect the Firewall housing for or wear or damage and replace as necessary.

**⚠ CAUTION!** *UV SYSTEM IS FRAGILE. Never handle the UV lamp or Quartz Spiral with bare hands. UV Lamp and quartz sleeve must be free of oils and contaminants to ensure proper operation. Use a soft non-abrasive cloth to clean.*

4. Test Firewall UV system by unplugging the lamp. 20 second audible alarm and Firewall light should go out. Cold and Ambient icons should be disabled.

5. The filters should be replaced every 6 months or 1250 gallons, whichever comes first. Local water conditions will dictate your exact filter requirements and service intervals. Flush filters per manufacturer's recommendations to rinse carbon fines. Do not rinse the filters through the unit solenoid valve(s) and tanks if at all possible to avoid contamination.

6. Ensure there is adequate (minimum of 2") clearance around the unit and clean the condenser grill and compressor fan to provide efficient cooling system operation.

7. Test the leak detection function. Short sensor pins together to enable alarm. Reboot to clear alarm.

8. Clean and sanitize the drip tray and drip tray grille. Replace if needed.

9. Sanitize the cold and ambient circuits annually per instructions in the pre-installation procedures.

10. Clean and sanitize external surfaces of the unit. Use soap and water or chemicals that are compatible with ABS plastic and will not damage or degrade the product surfaces.

## **HOT TANK DESCALING INSTRUCTIONS**

The Hot Tank requires removal of mineral deposits (descaling) on a regular basis. Typically descaling should take place every 6 to 12 months to preserve the long-term health of your unit.

Use non-toxic cleaner such as ScaleKleen, DEZCAL, 20% Citric Acid Solution, or Undiluted Vinegar Solution to remove mineral deposits as directed by the manufacturer depending upon filtration and local water conditions.

Descaling is an important process that removes calcium deposits, or scale, that can build up inside a tank over time. Calcium and scale is non-toxic but left unattended will hinder your unit's performance.

**⚠️ WARNING!** **PERSONAL PROTECTIVE EQUIPMENT REQUIRED.** *Always ensure proper ventilation and use rubber or nitrile gloves and eye protection when using chemicals. Refer to Material Safety Data Sheet for specific requirements of each product.*

**⚠️ CAUTION!** **STAINLESS STEEL TANK DESCALING.**

*The Hot Tank is made from stainless steel. Ensure descaling solution is compatible with stainless and always flush the unit completely. Dispose in an environmentally safe manner.*

### **Materials Needed:**

- Personal Protective Equipment. Rubber or Nitrile Safety Gloves and Protective Eyewear
  - Phillips Screwdriver
  - Temperature Gauge
  - Water Pitcher or Container to collect water from the faucet
  - 19 Liter (5 gallon) container or drain basin
  - Citric Acid Based Cleaner
  - ¼" Plastic Tubing, at least 4 feet in length, and assorted ¼" quick connect fittings
  - Sanitizing Cartridge
  - Food Coloring
1. Put descaler per directions and 3 drops of food coloring into the descaling cartridge.
  2. Connect descaling cartridge to the inlet water supply and connect to Inlet Bulkhead Fitting on the back of the **WL380 Water Treatment System**. Turn on Water Supply.
  3. Select Hot Water and depress the Main Dispensing Button on the Front Control Panel until descaling solution (colored water) comes out of the faucet. Container and drain basic will be required to catch water from the faucet.
  4. Turn off water supply and remove sanitizing cartridge from inlet water supply. Reconnect water supply to inlet fitting.

5. Allow descaling solution to remain in the Hot Tank for 15 minutes (length of time may vary depending on water conditions).
6. Place a pitcher, catch basin or other container under the faucet of the **WL380 Water Treatment System**.
7. Flush the Hot Tank until water runs clear.
8. Once clear Water dispenses from the faucet the Hot Tank has been descaled. Always ensure the **WL380 Water Treatment System** is performing to the customer's satisfaction.

**⚠ WARNING! HOT WATER. HOT WATER. Unit produces Hot Water in excess of 80°C (175°F). Water above 52°C (125°F) can cause severe burns or scalding. Keep unauthorized people and children away from the unit to avoid accidental dispensing of hot water.**

**⚠ CAUTION! MUST REPLACE HOT TANK 3-5 YEARS DEPENDING ON USAGE. The Hot Tank and its controls must be replaced a minimum of every three to five years to ensure efficient and dependable operation.**

**⚠ WARNING! REINSTALL ALL PANELS AND COVERS. Always reinstall all Panels, Protective Covers, and Fasteners after servicing equipment. Failure to do so could result in severe personal injury and will void the certifications and warranty of the equipment.**

*For additional information and updates visit <http://techportal.waterlogic.com>*

*Contact Waterlogic for assistance or help finding an authorized service representative.*



## REPLACEMENT COMPONENTS - CONSUMABLES

Component	WLCP No.	Recommended Replacement Frequency
UV Lamp - 13W Watts Assembly	10-8750	Every 6 months (typical single shift, or as required) Factory PN CT-2090-A
Hot Tank 1.6L with Thermistor 120V 500 Watts	10-4029	Every 3-5 Years or as required. Factory PN HT-3024
GAC Filter - 10" Carbon Activated Inline Filter - <i>Optional</i>	FT-0035	Every 6-months or as required. Local water conditions will determine proper filter type and maintenance schedule. Factory PN FT-0035-IL-WLT
Carbon Block - 10" CBC 1 Micron Lead and Cyst Reduction Inline Filter – <i>Optional</i>	FT-0063	Every 6-months or as required. Local water conditions will determine proper filter type and maintenance schedule. Factory PN FT-0063-IL-WLT
Sediment Block - 10" Sediment 20 Micron Inline Filter - <i>Optional</i>	FT-0053	Every 6-months or as required. Local water conditions will determine proper filter type and maintenance schedule. Factory PN FT-0053-IL-WLT

Replacement parts can be obtained from *Waterlogic* or an *Authorized Waterlogic Dealer*. See Parts Layouts, Drawings, and Lists for additional repair parts.

### Hot Tank Service

Hot Tanks (with controls) must be replaced at least every 3-5 years depending on usage. Descaling the Hot Tank may be required on a regular basis depending upon filtration and local water conditions. See Service Section.

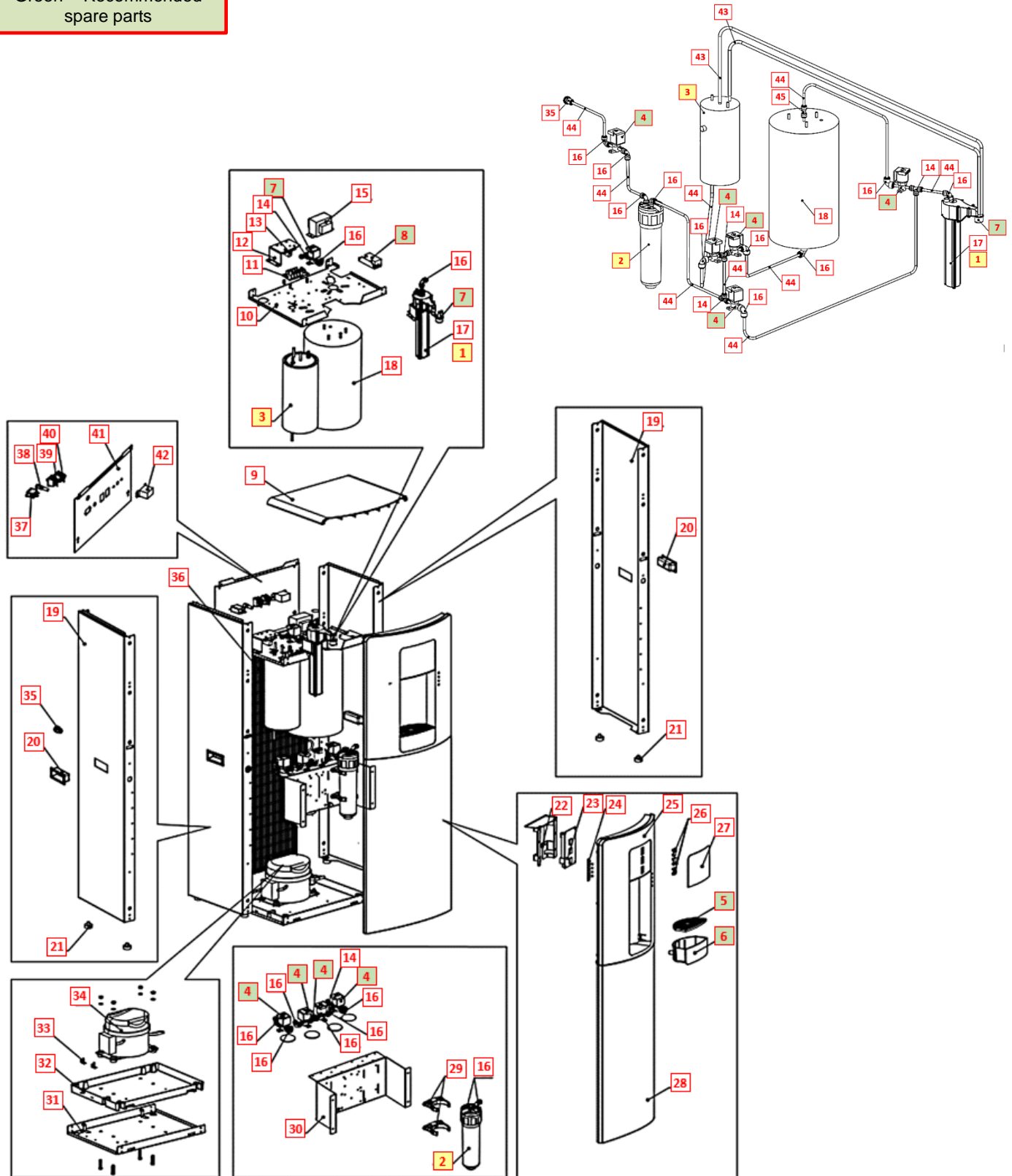
### NOTE:

At the **end of this product's life**, ensure that it is disposed of in an environmentally friendly manner which is fully compliant **with all Federal/State/Local Requirements and Guidelines**.

## WL380 PARTS DRAWING

Yellow = Consumables  
 Green = Recommended spare parts

### Wetted Parts



## WL380 PARTS LIST

No	Part No	Description	WLCP Part No.	Stocked?	
<b>Consumables</b>					
1	10-8075	13W UV Lamp Assembly	CT-2090-C	Yes	
2	FT-0035-IL-WLT	GAC Filter - 10" Carbon Activated Inline Filter – <b>Optional</b>	FT-0035	Yes	
	FT-0063-IL-WLT	Carbon Block - 10" CBC 1 Micron Lead and Cyst Reduction Inline Filter – <b>Optional</b>	FT-0063	Yes	
	FT-0053-IL-WLT	Sediment Block - 10" Sediment 20 Micron Inline Filter – <b>Optional</b>	FT-0053	Yes	
3	10-4029	Hot Tank 120V/500W 1.6L with thermistor <u>*Thermistor not sold separately - sold with Hot Tank only</u> <i>Replace every 3-5 Years</i>	HT-3024	Yes	
3.1	12-1360	Overload with Manual reset - 221° F (105° C) <i>Recommend stocking 2 each per every 10 units purchased</i>	HT-3012	Yes	
<b>Recommended Spare Parts</b>					
4	12-1500	Solenoid Valve DC24V 1000mm <i>Recommend stocking 2 each per every 10 units purchased</i>	PU-4016	Yes	
4.1	CU-0001	Solenoid Cushion <i>Recommend stocking 2 each per every 10 units purchased</i>	CU-0001	Yes	
5	NA	Drip Tray Grill <i>Recommend stocking 4 each per every 10 units purchased</i>	PL-0029-L00-BL	No	
6	NA	Drip Tray Body <i>Recommend stocking 4 each per every 10 units purchased</i>	PL-0049-L00-BL-WLG	No	
7	NA	Hot Water Faucet <i>Recommend stocking 2 each per every 10 units purchased</i>	PL-1382	No	
8	12-8315	UV 15 W 120V/60Hz Electronic Ballast <i>Recommend stocking 2 each per every 10 units purchased</i>	EN-0008-L01-00	Yes	

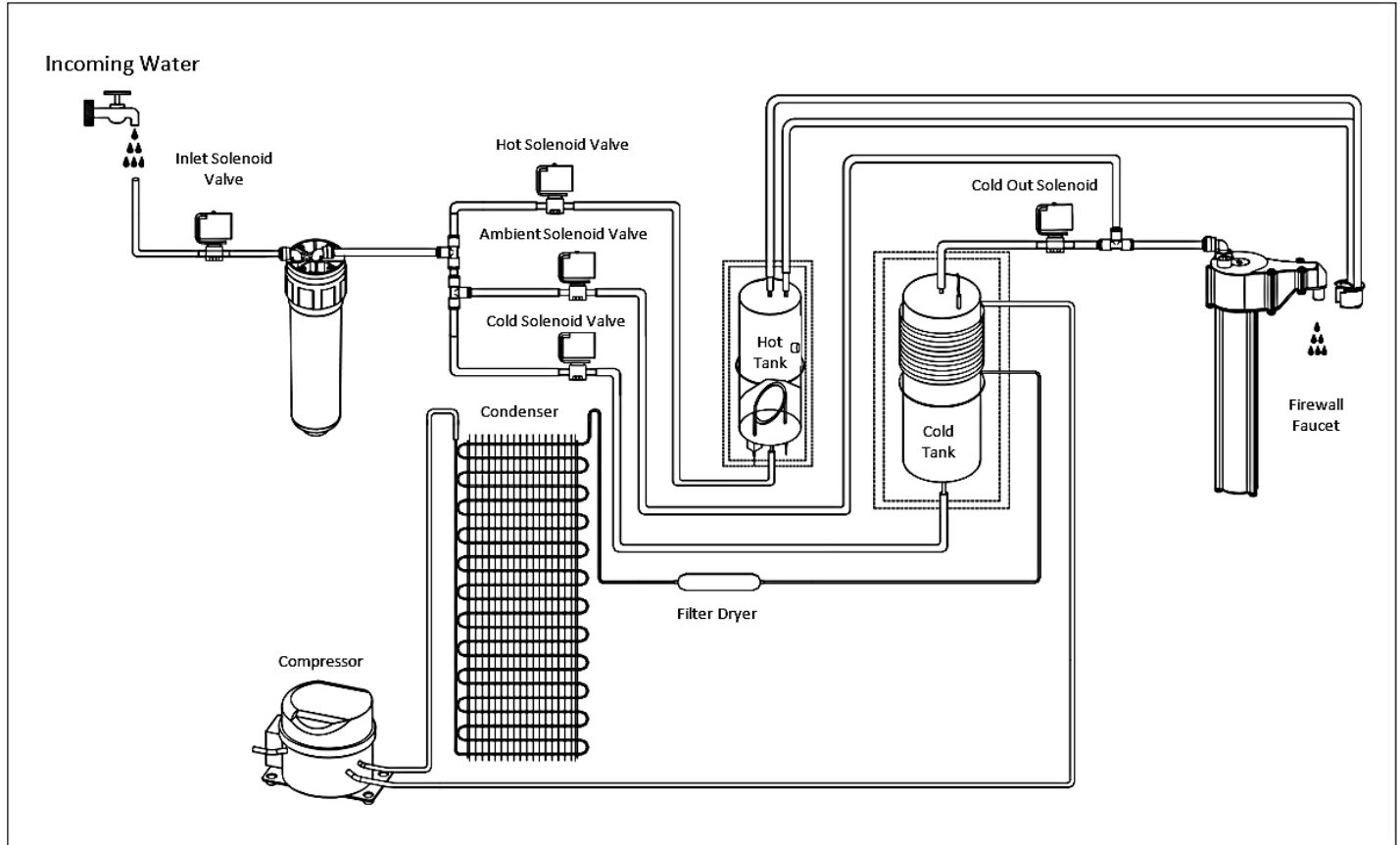
Not Shown	01-2076	ScaleKleen <i>Recommend stocking 2 each per every 10 units purchased</i>	NA	Yes	
<b>Remaining Parts</b>					
9	NA	Black Top Cover	PL-1381	No	
10	NA	Upper Shelf	ST-0034-L00-00	No	
11	NA	Leak Detection PCB	EN-6111-A	No	
12	NA	3minutes UV Timer PCB Fixing Bracket	ST-8287	No	
13	NA	Relay PCB	EN-0010-L00-00	No	
14	Purchase from John Guest	JG Equal Tee Connector 1/4" (PI0208S)	PU-4011-A	No	
15	No	Power Transformer	EL-0016-L00-00	Yes	
16	Purchase from John Guest	JG Equal Elbow Connector 1/4" (PI0308S)	PU-4008	No	
17	NA	Firewall Assembly	FW-0015-L00-00	No	
17.1	NA	Firewall Bracket	FU-0002-B	No	
17.2	FW-0008-L00-00	Quartz Spiral – 22 Turns	FW-0008-L00-00	Yes	

17.3	NA	Firewall UV Fixing Rubber (Bung)	CT-2078-B	No	
17.4	AK-0064	UV Sensor with Wire	AK-0064	Yes	
17.5	NA	Spiral Rubber Buffer	FW-0020-L00-00	Yes	
18	NA	Cold Tank Assembly (4Liters, No UV holder, No sub-tank)- FW	CT-2017-A	No	
19	10-4002	Side Panel	ST-8225	Yes	
20	10-4004	Black Plastic Handle	PL-1120	Yes	
21	10-3083	Unit Rubber Feet	ST-8016	Yes	
22	NA	Display PCB Cover Bracket	ST-8340	No	
23	NA	Display PCB	EN-0024-L00-00	No	
24	NA	LED PCB	EN-6139	No	
25	NA	Black Top Front Panel	PL-0017-L00-BL	No	
26	NA	Top Front Button Cover	PL-1379	No	
27	NA	Hot - Cold - Ambient Label	LP-0309-L00-00	No	

28	NA	Front Bottom Panel	PL-0020-L00-BL	No	
29	20-1010	2.8" Filter Clip	PU-4161	Yes	
30	19-1016	Filter Bracket	ST-8206-CN	Yes	
30.1	14-5011	Drain valve and Cap 5/16"	CT-2028 and CT-2031-A	Yes	
30.2	NA	Drain Valve Clamp 1/4"	CT-2044	No	
31	12-1602	Bottom Shelf	ST-8035	Yes	
32	NA	Leak Tray	PL-0095-L00-00	No	
33	12-3180	Leak Containment Tray Clip (sensor 0.5mm)	ST-8207-CN	Yes	
34	10-2200	Compressor (R134a 1/8HP) 110V/60Hz	CO-9001-A	Yes	
34.1	10-3003	Compressor Starter Relay	CO-9016	Yes	
34.2	10-5018	Compressor Overload	CO-9015	Yes	
34.3	12-1001	Filter Dryer	CO-9008	Yes	
35	10-3067	Bulkhead Union 1/4" x 1/4" John Guest P/N PI1208S	PU-4028-A	Yes	

36	12-1000	Wire Condenser	CO-9007	Yes	
37	NA	Power Socket	EL-0061-L00-00	No	
37.1	19-1015	Gasket for Power Socket	ST-8052	Yes	
38	EL-5053	Fuse Holder and Fuse 120V / 15A with One Wire	EL-5053	Yes	
38.1	10-3013	Fuse 120V / 15A	EL-5010	Yes	
39	12-5600	Red Heater and Compressor Switch	EL-5019-A	Yes	
40	10-3009	Switch - Heater/Compressor	EL-5005	Yes	
41	12-1622	Black Back Panel	ST-8028	No	
42	19-1069	Cold Tank Thermostat	CT-2070-A	Yes	
43	10-7040	Silicon Tube 5/16" for hot water	PU-4064	Yes	
44	Purchase from John Guest	JG LLD PE Tube - Blue O.D.1/4" John Guest P/N PE-08-BI-1000F-B	PU-4031-A	No	
45	Purchase from John Guest	JG Equal Straight Connector 1/4"(PI0408S)	PU-4010	No	
Not Shown	AK-0014-B	Flow Restrictor 1.8mm Hole <b><i>Before inlet to Cold Tank</i></b>	AK-0014-B	Yes	
Not Shown	10-3007	Power Cord 120V – 1840 mm	EL-5001-B	Yes	

## WL380 FLOW DIAGRAM





## WL380 PRINCIPLES OF OPERATION

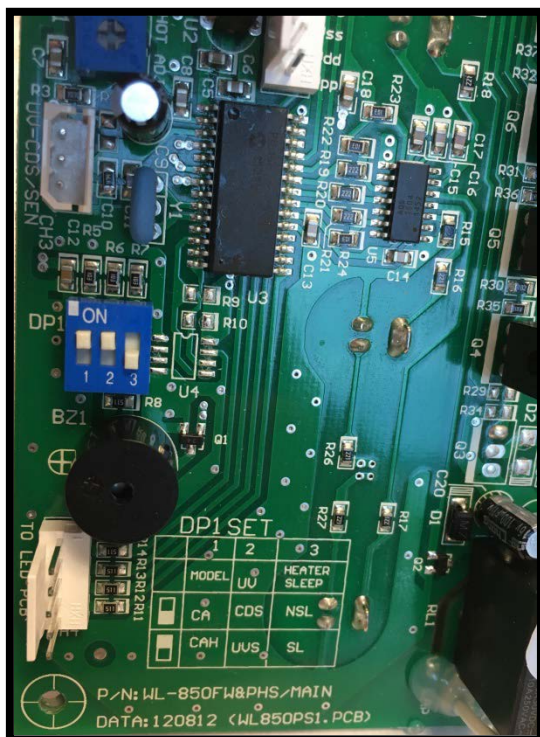
The **WL380** is a pressure fed machine that utilizes mains supply to push water through the unit to the faucet. The **WL380** provides Cold, Ambient, Hot and Extra Hot water with a modern touch-to-dispense interface. The **WL380** has a single cold tank 4-liter (1-gallon) and high efficiency cooling system. Filtration can be customized to meet your specific water conditions.

The patented Firewall purification system purifies the ambient and cold water before it is dispensed while providing a sanitary faucet and preventing outside contamination back into the water circuits. Our advanced UV sensor measures the dose of UV through the water stream to guarantee the safety of the water. The Firewall purification system will not allow unsafe water dispense and alarms the user if the system is inactive.

## WL380 PROGRAMING

Factory Default Settings shown in **bold**:

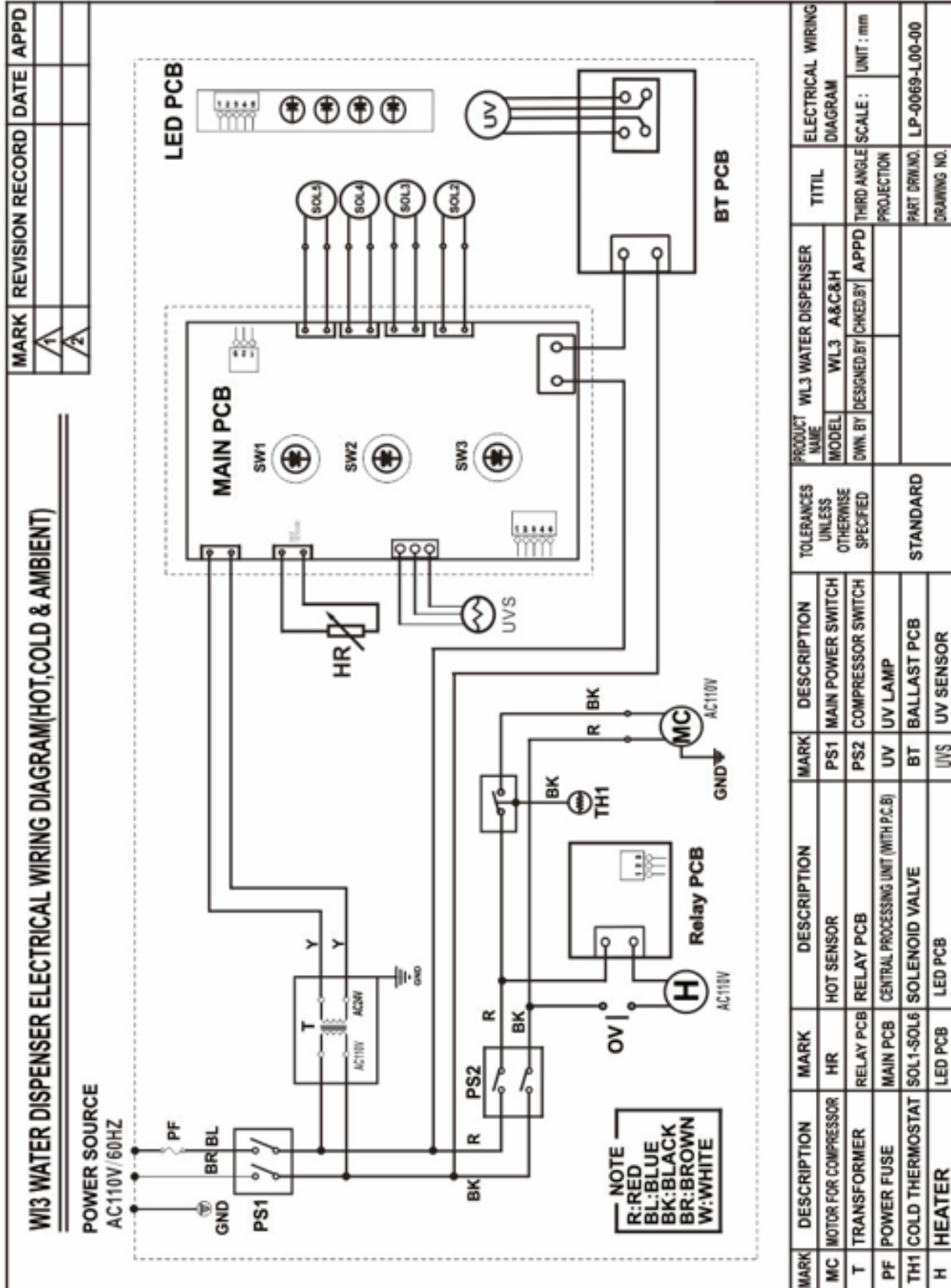
- **Cold Temp Set = 41° F (5° C)** – Adjustable Thermostat on back access panel. Do not turn down past 36°F to avoid freezing risk.
- **Hot Temp Set = 189° F (87° C)** – Not Adjustable. Advanced thermistor technology used to provide precise accuracy and extend life of the hot tank control system.
- **Extra Hot Temp Set = 203° F (95° C)** – Not Adjustable.
- **Leak Detector = Enabled** – WL380 comes with built in leak tray in the base with leak detector pins. Water in tray will activate leak detection alarm and shut off inlet solenoid to prevent leaks.



- **Energy Saver Mode (Heater Sleep)**  
Unit comes set with **energy saver or heater sleep mode enabled (SL)**. Heater will be disabled after 3 hours of machine inactivity (no icons selected). Turn Energy Saver off by moving pin 3 on dip switch 1 (DP1) located on front printed circuit board (PCB) to the NSL (no sleep) position.
- **Cold, Ambient, Hot (CAH) or Cold, Ambient (CA)**  
**WL380** hot water function can be disabled and the unit converted from a **Cold, Ambient, Hot, Extra-Hot (CHA)** to a Cold and Ambient (CA) only by moving pin 1 on dip switch 1 (DP1) located on front printed circuit board (PCB) to CA position.
- **UV Sensor Setting CDS or UVS**  
Set to UV Sensor (**UVS**) for UV function. Do not change factory setting. Pin 2 on DP1 should be UVS.

## WL380 ELECTRICAL DIAGRAM

**⚠ DANGER!** HIGH VOLTAGE ELECTRICAL HAZARD. PCB (Printed Circuit Board) contains High Voltage. Only trained and qualified technicians should attempt live testing.



## WL380 QUICK START GUIDE

**⚠ WARNING!** *Only trained and qualified technicians should attempt to install, maintain, or service Waterlogic equipment. Failure to follow all instructions in this manual could result in death, serious personal injury, or severe property damage.*

**⚠ DANGER!** **ELECTRICAL SHOCK HAZARD. UNPLUG OR ISOLATE FROM ELECTRICAL SOURCE.**  
*Only qualified personnel who have read and understand this entire manual should attempt to install, or service this unit, failure to do so could result in death or serious injury. DO NOT plug into an electrical supply until specifically instructed.*

- 1) Unpack the **WL380** and set on hard level surface as close as possible to electrical and water supply. Ensure adequate clearance to allow for proper air movement and heat exchange (4" min).
- 2) Remove the filters and flush (follow instructions on filter). Reinstall filters. Always ensure proper filtration to meet local water conditions and service requirements.
- 3) Establish 40–60 psi 0.5 gal/min potable water supply. An accessible shut off and leak protection is recommended. Always use a pressure regulator.
- 4) Connect power cord to 120 VAC - 60 Hz 15 Amp GFCI protected outlet.
- 5) Turn on the RED power switch. GREEN switch MUST remain OFF until the WL380 tanks are filled or the hot tank overload will trip.

**⚠ CAUTION!** **NEVER TURN ON HEATER BEFORE FILLING HOT TANK.**

*Green Compressor/Heater Switch must be in the O=OFF position while the hot tank is empty. Damage could occur within one minute and the overload (high limit) will require manual reset if heater is turned on with an empty hot tank.*

- 6) Fill the hot and cold tanks by dispensing until a steady stream of water flows from each.
- 7) Turn ON the green power switch to activate the heater and refrigeration systems.

It will take approximately 10 minutes to heat 1.6 liters of water in the hot tank and 45 minutes to chill the water to the cold tank to set point temperatures. A warm condenser coil on the back of the unit indicates the refrigeration system is exchanging heat and operating properly.

**⚠ WARNING!** **VERY HOT WATER CAN BURN OR SCALD.**

*Hot water should be dispensed carefully into insulated container to avoid injury.*

- 8) Function check for flow, temperature, taste, and odor to ensure customer expectations are met. Inspect and check all connections for leaks/drips and clean unit and area before leaving.

## **PRE-INSTALLATION PROCEDURES**

**⚠ DANGER! ELECTRICAL SHOCK HAZARD. UNPLUG OR ISOLATE FROM ELECTRICAL SOURCE.**  
*Only qualified personnel who have read and understand this entire manual should attempt to install, or service this unit, failure to do so could result in death or serious injury. DO NOT plug into an electrical supply until specifically instructed.*

**⚠ WARNING! ALWAYS SANITIZE BEFORE USE.**  
*Sanitize before use to eliminate any potential microbiological contaminants and avoid taste/odor issues.*

**CAUTION! DRIP TRAY DRAIN.**

*If you intend to provide a drip tray drain for your customer, be aware that you will be called multiple times per month to service and unclog the tubing leading away from the drip tray to drain. Users will clog the drain with paper clips, erasers, napkins, tea bags, gum, and various other intended items. Waterlogic recommends you establish a minimum of weekly visits to the machine for cleaning of the drip tray drain.*

### **Material and Tools Needed:**

- Personal Protective Equipment. Rubber or Nitrile Safety Gloves and Protective Eyewear
  - Phillips Screwdriver. Temperature Gauge.
  - Water Pitcher or Container to collect water from the faucet
  - 5-gallon container or drain basin
  - Sanitizer - Household Bleach (5.25% Sodium Hypochlorite)
  - 1/4" O.D. Plastic Tubing, at least 4 feet in length, and assorted 1/4" quick connect fittings.
  - TDS Meter and Test Strips for measuring chlorine. - Optional
  - 1/8" NPT Female Thread to 1/4" Compression Fitting (Used to connect hose to drain fittings)
1. Unpack the **Waterlogic WL380** and check exterior for damage. Dispose of packaging properly.  
**⚠ WARNING! WL380 IS HEAVY.** *Use proper lifting aids and handling techniques to avoid injury. Use assistance as single person lift could cause injury. Always drain before handling and transporting and handling to reduce the weight of the unit.*
  2. Open the front lower panel (1 screw at center bottom) or top lid (2 screws at rear) to access the filter sump of the table top model.

### **Flush Filters**

**⚠ CAUTION! FILTER FLUSH REQUIRED.**

*WL380 contains a carbon filter that must be flushed before use to avoid contaminating with carbon fines. Never rinse or flush filters through solenoids or tanks.*

3. Remove the filter(s).
4. Flush thoroughly (at least 2 gallons) with fresh water to clear carbon fines. Test outlet water with TDS (Total Dissolved Solids) Meter to determine exact flushing volume required. See instructions on filter or manufacturers recommendations for more specific requirements.
5. Use an extra filter sump with cartridge (media) removed as tool to mix and introduce sanitizer or remove filter cartridge (media) from the sump by unscrewing head from body (reverse or left-hand thread) and set filter cartridge aside for installation after sanitization is complete.

## Firewall UV System Functional Test

**⚠ WARNING! ULTRAVIOLET RADIATION.** *Protect your skin and eyes against ultraviolet rays. Never look directly at an operating UV light. Do not remove from housing when light is on. Always disconnect lamp before removing from the housing.*

6. Turn on red power switch. Check that UV light ignites by looking reflection of light on finger just below the tip of the faucet. The blue glow around Firewall housing indicates that the lamp is lit.
7. Disconnect the UV lamp connector and verify the Firewall UV lamp alarm annunciates for 20 seconds and status LED goes out. Reconnect and cycle power off for 10 seconds. Reboot to clear alarm and reactive the Firewall system.

## Sanitize

Sanitize using a household bleach solution or other approved cleaner throughout the cold and ambient water circuits. Follow all instructions on the sanitizer and flush with fresh water through the faucet until taste and odor is acceptable.

**⚠ WARNING! USE PROPER PERSONAL PROTECTIVE EQUIPMENT**  
*Always ensure proper ventilation and use proper personal protective equipment such as gloves and eye protection when using chemicals. Refer to Material Safety Data Sheet for specific requirements of each chemical product. Take all necessary precautions to prevent sanitizer from contacting eyes, clothing, and any other surfaces in could damage.*

**⚠ CAUTION! USE SANITIZER COMPATIBLE WITH STAINLESS STEEL AND ACETAL PLASTIC.**  
*Do not allow the sanitizer solution to remain in the system for more then 10-15 minutes unless otherwise directed by the sanitizer manufacturer.*

8. We recommend using a household bleach solution (Sodium Hypochlorite 5 - 10% Concentration). Concentration should be 1 teaspoon = 5 ml = ½ cap full for every 2 Liters (appx ½ gallon) of water.
9. Remove sump and pour ½ cap (5 ml) for table top or 1 cap (10ml) of household bleach solution into filter sump and feed into ambient and cold circuits by first dispensing 3 seconds of ambient and then dispensing out 500 ml (approximately 16 oz.) of cold water or until sanitizer is mixed into cold tank. Ensure green switch (compressor/heater) is OFF.

## Flush the Sanitizer from the Machine

10. Reinstall carbon filter(s) or filter cartridge(s) and place a pitcher, catch basin, or other container under the faucet of the **WL380** to collect flush water. 5-gallon bucket is needed if no drain accessible.
11. Flush the cold and ambient circuit. Run several gallons of water through the faucet by dispensing cold water to dilute and remove the sanitizer from the circuit. You may use chlorine test strips to evaluate the water or use odor/taste. Once the sanitizer odor/taste has been flushed out of the cold side of the machine, flush the ambient circuit.

**Note:** *There is a 1 minute maximum continuous dispense timer as safeguard. Release and reapply if timeout occurs during dispensing process.*

12. The sanitization process for the cold and ambient circuits is now complete.

### Fill the Hot Tank

13. Press and hold the hot dispense icons (middle and bottom) simultaneously to fill the hot tank. A steady stream of water will dispense from the faucet once the hot tank is full.

**⚠ WARNING! HOT CIRCUIT IS NOT SANITIZED. WATER MUST EXCEED 171° F (77 ° C)**

*Water in the hot circuit is not sanitary until the temperature over 171°F (77 ° C) for 5 minutes. DO NOT ingest and avoid contact until hot water until heater has sanitized the tank.*

### Cold Water / Compressor Test

14. Switch on the green power switch (turns on the compressor and heater). Always ensure tanks are full of water before turning on the heater or the heater overload (high limit) will open and require manual reset. Once the compressor starts, the heat exchange process will begin and you should be able to feel the discharge of heat at the condensing coil (rear grill) of the machine. Heat exchange is a signal that the refrigeration system is working. The compressor will become hot to touch and a slight vibration will indicate it is on.

15. The cold tank set temperature is 41°F (5° C) and it should take about 45 minutes for the unit to chill down to the default set point temperature of 41°F (5° C) assuming inlet water of 75°F (24° C) and proper ventilation and environment.

16. Once the machine reaches its target temperature, the compressor will shut off. Draw a glass of cold water and verify it is has been chilled to proper temperature with a thermometer.

**⚠ WARNING! VERY HOT WATER CAN BURN OR SCALD.**

*Hot water should be dispensed carefully into insulated container to avoid injury.*

### Hot Water / Heater Test

17. Always ensure tanks are full of water before turning on the heater or the overload (high limit) will open and require manual reset. It will take the heater approximately 10 minutes to heat the water from ambient 75°F (24° C) to the factory set point of 189°F (87°C). Dispense a cup of hot water and measure temperature with thermometer to verify.

### Extra Hot Water Test

18. Select the extra hot cycle icon until it lights and hold for 2 seconds. Release and the icon should begin to flash indicating the extra hot cycle is activated. Icon will continue to flash while water in hot tank heats to the extra hot temperature of 203° F (95° C). Icon will stop flashing once tank has reaches 203° F (95° C). This should take a minute or two for heater to elevate temperature in the tank 14° F (10° C). Dispense a cup of hot water and verify with thermometer.

### Drain the WL380 for Transport

19. Drain the **WL380** for transportation per the Draining Instructions in this manual.

**⚠ WARNING! STORE AND TRANSPORT UNIT EMPTY. ALWAYS SANITIZE BEFORE REUSE.**

*The unit must be completely drained and sealed before storing to avoid stagnation and reduce microbiological contamination (potential bacterial growth).*

## **WL380 DRAINING INSTRUCTIONS**

**⚠ WARNING!** *WL380 IS A HEAVY OBJECT. USE PROPER LIFTING AIDS AND HANDLING TECHNIQUES TO AVOID INJURY. Single person lift could cause injury. Always drain before handling to reduce weight.*

### **Draining Notes**

We recommend that you drain both the hot and cold tanks in the WL380 before moving or storing. The cold-water circuit of the **WL380** consists of a 4-liter (1-gallon) cold tank. Cold tanks have outlet solenoids that seal the circuit and must be manually vented to drain properly. Remove the cold tank outlet line before the cold outlet solenoid valve to break the vacuum and vent the cold tank. This will vent the cold tank and allow air to replace the water as it drains and ensure proper drainage. The **WL380** has front facing cold and hot tank drain ports for easy access. The table top front panel must be opened to access the drain ports. The hot tank has a vent line that is open to atmosphere through the faucet.

Prior to draining the hot tank, turn OFF the green compressor/heater switch, and dispense 2 liters of hot water from the machine. This will cool the tank and help prevent exposing personnel and equipment (drains, catch basin, etc.) to scalding hot water.

**⚠ WARNING!** *VERY HOT WATER CAN BURN OR SCALD. Hot water should be dispensed carefully into properly insulated container to avoid injury.*

### **Disable Cold and Hot Tanks – Cool Hot Tank if necessary**

21. Turn off the green power switch to disable the heater and compressor.
22. Dispense 2 liters of water through the hot tank to cool the water temperature in the hot tank.

### **Turn off Water Supply and Bleed Water Pressure**

23. Isolate the unit from feed water by turning off the supply valve.
24. Dispense cold still water to relieve any pressure built up in the system.
25. Remove the water supply line from the unit.
26. Install dust cap or plug into water supply line bulkhead fitting.

### **Drain the Cold Still Water Tanks and Circuit**

27. Open lower front panel hatch panel by removing the lower center locking/retaining screw and carefully lower the front panel from its catch. The panel will then pull out and can be removed from the unit by pulling out of two plastic retainer clips at the bottom.
28. Remove top cover (lid) to access top of cold tank. Vent the cold tank by removing the cold tank outlet line before the cold outlet solenoid valve to break the vacuum and vent the circuit.
29. Remove the cold tank drain line cap and drain the 4-liter (1-gallon) into container.

### **Drain the Hot Water Tank**

30. Remove the hot tank drain cap from the unit.
31. Drain 1.6 liters of hot water into suitable container.

### **Reassemble the Unit**

32. Reinstall cold outlet line and all drain caps.
33. Install top cover and lower front panel and tighten the locking screws to secure.

## **INSTALLATION PROCEDURES**

### **Safety and Installation Guidelines**

Ensure all Local, State, and Federal Laws and Codes including health and safety guidelines are met when installing **Waterlogic** Equipment. Only qualified service technicians should attempt installation and service of **Waterlogic** Equipment.

- ⚠ WARNING! ELECTRICAL SHOCK HAZARD.** *Always unplug (isolate from power supply) to prevent electrical shock except where electrical tests are specified.*
- ⚠ WARNING! IMPROPER SUPPLY OR CONNECTION CAN RESULT IN RISK OF SHOCK.** *Connect to a 15-amp 120V 60Hz properly grounded outlet (GFCI is recommended). Ensure polarity is correct and always use a 3-prong outlet. Consult a qualified electrician if you have any questions.*
- ⚠ WARNING! USE ONLY Waterlogic SUPPLIED POWER CORD (EL-5001-A).** *Locate system within 5 feet of power supply. Never use an extension cord or adapter. Do not use a damaged power cord or plug. Keep power cord out of heavy traffic areas and away from heat sources. Do not, under any circumstances, remove ground prong or alter the power cord. Never pull the power plug from the outlet with a wet hand or allow the plug to get wet. Failure to use the supplied power cord will void UL Certification and Warranty.*
- ⚠ CAUTION! INDOOR USE ONLY.** *Intended for Household Use. Never expose to direct sunlight, heat sources, or ambient air temperature above 37°C (100°F) or below 2°C (35°F). Install indoors and keep unit away from excessive humidity. Never expose to freezing temperatures. Ensure there is adequate clearance around the unit to allow refrigeration system condenser to dissipate heat. Warmer environments require more clearance around the unit. Minimum clearance around all surfaces of the machine is 2-inches. Installs where the ambient temperature exceeds 27°C (80°F), require a minimum of 4-inches clearance for proper heat dissipation and efficient operation.*
- ⚠ CAUTION! USE A WATER PRESSURE REGULATOR.** *Waterlogic will not be responsible for injury or damage caused by excessive water pressure. Operating pressure must be 40 psi to 60 psi. Be aware of any potential pressure surges caused by building/municipal pumping stations.*
- ⚠ CAUTION! USE UV STABILIZED SUPPLY LINES.** *Feed the unit with a potable ambient or cold water supply only. Feed water over 37°C (100°F) can damage the treatment components. Water block devices and external leak detectors are strongly recommended. Locate the unit as close to the water supply and the electrical connections as possible. Locate the unit as close to the water supply and the electrical connections as possible. Immediately isolate or close water supply valve and contact service representative if leak is noticed.*
- ⚠ WARNING! STORE UNIT EMPTY. ALWAYS SANITIZE BEFORE USE.** *The unit must be completely drained and sealed before storing to avoid stagnation and reduce microbiological contamination (potential bacterial growth). Sanitize before use to eliminate any potential microbiological contaminants*

**WL380** can be combined with RO Filtration Systems. RO will require a drain connection. Refer to all applicable plumbing codes and standards in your area for these requirements (air gap connections and back flow prevention may be necessary).





All Pre-Installation and Sanitization Procedures as prescribed in this manual must be performed before installing the **WL380**.

Always install indoors and place the **Waterlogic WL380** on a firm, flat and stable surface. Add reinforcing bracket or anchor is necessary to ensure unit is stable and avoid tipping injury.

Attach the potable water supply line to the 1/4" feed water inlet bulkhead fitting on the back of the unit. **Waterlogic** requires the use of a water pressure regulator. Water feed pressure must be controlled between 40-60 psi. Turn on the water supply and check for leaks.

1. Check to ensure that both the red and green power switches are in the *O=OFF* position.  
**NOTE:** Switches have internal LED that illuminates when placed in *I=ON* position.
2. Connect the **Waterlogic** power cord to the back of the **WL380** and to proper power supply.
3. Turn the Red Power Switch to *I=ON* position. The four front LED's should illuminate green.

**⚠ CAUTION! NEVER TURN ON HEATER BEFORE FILLING HOT TANK.**

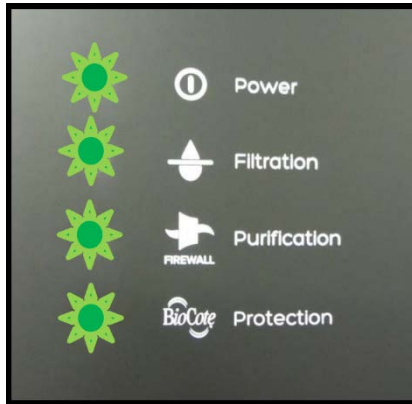
*Green Compressor/Heater Switch must be in the O=OFF position while the hot tank is empty. Damage could occur within one minute and the overload (high limit) will require manual reset if heater is turned on with an empty hot tank.*

4. Verify that the Firewall UV Purification System is operating as expected. No alarm annunciated and Firewall Purification status light is illuminated green.
5. Prime the Ambient Circuit. Holding a container under the dispensing faucet, select the ambient button until it illuminates and hold until continuous flow water is dispensed. Release the ambient dispense icon and the back light will go off and the solenoid will close to stop flow.
6. Prime the Cold Circuit. Holding a container under the dispensing faucet, press and hold the cold dispensing button until a continuous flow of water is obtained. Once a continuous flow is obtained, release the dispensing button. Cold tank is now full.
7. Prime the Hot Tank. Holding a container under the dispensing faucet, press the hot dispense icons (middle and bottom) simultaneously until they both light and hold until a continuous flow of water is obtained from the faucet. Release stop dispense. Hot tank is now full.
8. Move the **Waterlogic WL380** into its final operating position. Be sure that a minimum of 2" clearance is maintained around both the sides and the back of the unit. This is important to allow proper airflow and heat exchange of refrigeration system.
9. Level unit using the adjustable feet if necessary. Never install on incline and attach support bracket or tie back to wall or floor if needed to secure and prevent accidental tipping.
10. Turn the green compressor switch to *I=ON* position. Check compressor operation. This can be done by listening to the unit when the green compressor switch is turned on and/or feeling the compressor for vibration. All tanks must be full.

11. Cold water should drop approximately one degree every 1-1/2 minutes. Condenser will be warm to touch indicating cooling system is exchanging heat.
12. The hot water will heat rapidly and should reach set point in about 10 minutes.
13. When the unit has reached its Hot Temp Set Point, the heater will cycle off. When the unit has reached its Cold Temp Set Point Temperature, the compressor will cycle off.
14. Select the extra hot cycle icon until it lights and hold for 2 seconds. Release and the icon should begin to flash indicating the extra hot cycle is activated. Icon will continue to flash while water in hot tank heats to the extra hot temperature of 203° F (95° C). Icon will stop flashing once tank has reaches 203° F (95° C). This should take a minute or two for heater to elevate temperature in the tank 14° F (10° C). Dispense a cup of hot water and verify with thermometer.
15. Once the unit is at the target temperature(s), sample the water to ensure water meets expectations and additional rinsing or adjustment is not required.
16. **Verify Settings** (refer to Programming Instructions for more details):
  - **Cold Temp Set** = 41° F (5° C) – Do not turn down past 36°F to avoid freezing risk.
  - **Hot Temp Set** = 189° F (87° C) – Not Adjustable.
  - **Extra Hot Temp Set** = 203° F (95° C) – Not Adjustable.
  - **BioCote Surface Protection** = Always enabled to help protect surfaces.
  - **Leak Detector** = Enabled – WL380 comes with built in leak tray in the base with leak detector pins. Water in tray will activate leak detection alarm and shut off inlet solenoid to prevent leaks.
  - **Energy Saver Mode** = On – Unit comes set with energy saver or sleep mode enabled. Heater will be disabled after 3 hours of machine inactivity (no icons selected). Turn Energy Saver Off by moving dip switch on front printed circuit board (PCB).
17. Recheck unit for any leaks. External Leak Protection is always recommended.
18. Review operation and functions with the customer and ensure that water flow, taste, smell, and temperature meets or exceeds their expectations. Be sure to note the Energy Saver Feature if it is enabled to avoid unnecessary service calls. Ensure the user understands the Firewall Purification system and review the benefits of our exclusive purification technology.

## WL380 FAULT CODES AND ALARMS

WL380 provides user reassurance of key functional elements with 4 lights illuminate green to indicate total purification security.



Power Light – Indicates ON/OFF Status.

Light flashes with audible alarm when leak detected.

Filtration Light – Indicates Filtration Present.

No filter timer or flow-counter function.

Firewall Purification Light – Indicates Firewall Status.

Firewall UV is active with green lit and inactive when off.

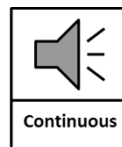
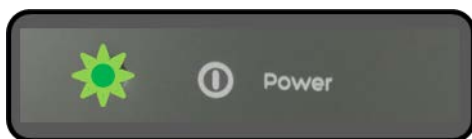
BioCote® Protection Light – Indicates BioCote® Present.

Antimicrobial Surface Protection

### All Status Indicator Lights Off

No power to unit or front PCB. Ensure power supply and red power switch is on. See Troubleshooting for further instructions.

### Power Light Flashing with Continuous Audible Alarm

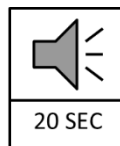
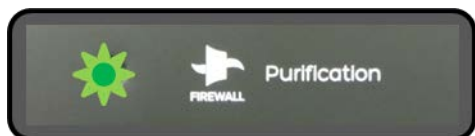


Leak Detected.

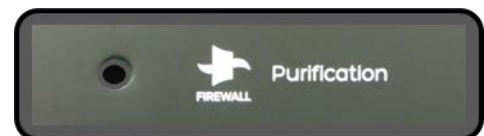
Isolate from power and turn off water supply. See Troubleshooting for further instructions.

### Firewall Purification Light Out and 20 Second Audible Alarm

#### Firewall UV Active



#### Firewall Disabled



Firewall UV System is inactive. See Troubleshooting for further instructions.

## WL380 FAULT CODE TROUBLESHOOTING

1. No Green LED Status Lights
2. Power Light Flashing Green and Continuous Audible Alarms – Leak Detected
3. Firewall Purification Light Out and 15 Second Audible Alarm

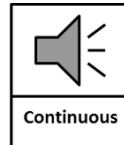
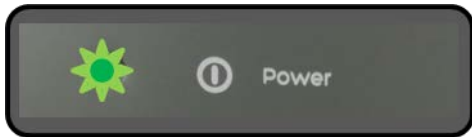
### 1. FAULT CODE: No Green LED Status Lights



Possible Reason	Solution
Power Problem	<p>Are red and green switches on back illuminated?            Yes – Check Power supply to front PCB            No - Check for power disruption.</p> <p>Does outlet have power?            Yes- Check Power Cord to ensure it is properly seating in both sockets and in good condition. Then check 15-amp Fuse            No – Check GFCI or Circuit Breaker to reestablish power</p>
Front PCB Issue No Power	<p>Check white 24 VDC power supply line is connected to the front PCB is supplying 24VDC. – replace Transformer if no 24VDC supply            See Power Troubleshooting for more details.</p>
Front PCB Faulty	<p>24VDC is properly supplied to front PCB. Replace PCB.</p>

## 2. FAULT CODE: Power Light Flashing Green and Continuous Audible Alarms – Leak Detected

Indicates that the Leak Detector has sensed water in the Leak Tray and Cold and Ambient dispense will be disabled to prevent untreated water from dispensing through the Firewall.

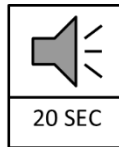
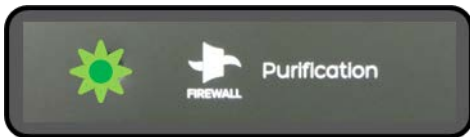


Possible Reason	Solution
<p>Water is present in the Bottom Tray, causing the leak detection to trigger.</p> <p><i>*Leak Detection consists of two metal pins in leak tray</i></p>	<p>Remove the lower front panel. Tip the unit slightly to drain, dry Bottom Tray completely.</p>
<p>Leak in <b>WL380 Water Treatment System</b></p>	<p>Water present in the bottom of the <b>WL380</b></p> <p>Clear Leak Detection Tray to ensure inside of unit is dry.</p> <p>Drip Tray over fill may enter into unit. Clear drip tray. Readjust leveling feet so drip tray over fills forward.</p> <p>Check for source of leak and fix as necessary.</p>

### 3. **FAULT CODE: Firewall Purification Light Out and 15 second Audible Alarm**

Indicates the Firewall UV system is not detecting adequate dose of UV to ensure safe water. The Cold and Ambient dispense icons will be disabled and cold and ambient water will not dispense. Hot water will still dispense.

#### Firewall UV Active

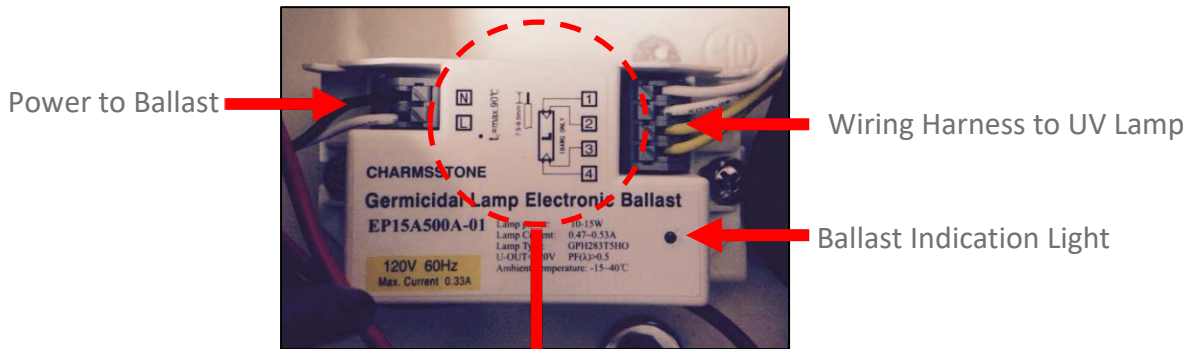


#### Firewall Disabled

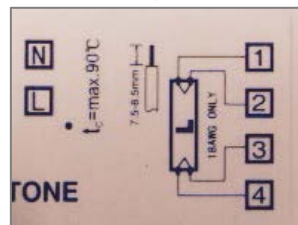


Possible Reason	Solution
Firewall UV System does not have adequate dose of UV.	<p>Check UV System</p> <ol style="list-style-type: none"> <li>If Ballast Indication Light is Green – the system should be operational. Ensure UV lamp is on. Replace Lamp. If lamp is replaced and problem persists, replace UV Sensor.</li> <li>If Ballast Indication Light is Red, change UV Lamp.</li> <li>If Ballast Indication Light is not lit – check power to Ballast. If power is going to Ballast – replace Ballast.</li> </ol>

#### Remove Cover to locate Ballast



N = Black Wire  
L = White Wire (Live)

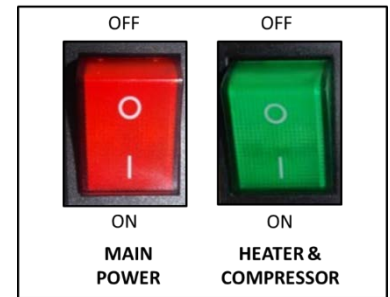


1 = White Wire  
2 = White Wire  
3 = Yellow Wire  
4 = Yellow Wire

## **POWER TROUBLESHOOTING INDEX**

1. Red Power Switch and Green Heater & Compressor Switch won't light
2. Red Power Switch and Green Heater & Compressor Switch is lit but the Status LED lights on the Front are not lit
3. Compressor Runs but does Not Chill
4. Compressor is Not Running

### **1. Red Power Switch and Green Heater & Compressor Switch won't light**



Possible Reason	Solution
Circuit Breaker	Check the Circuit Breaker
Fuse is Blown	Replace Fuse. Use 15-amp Waterlogic Fuse
Defective / Loose Power Cord	Check that Power Cord is properly plugged in. If it is properly plugged in, use a different power cord to verify. Use only Waterlogic supplied power cord.
Failed Socket - Power Line Noise Filter, Electro-Magnetic Interference filter (EMI)	Replace Socket - Power Line Noise Filter, Electro-Magnetic Interference filter (EMI)
Defective Red Power Switch	Replace Red Power Switch
Defective Green Heater & Compressor Switch	Replace Green Heater & Compressor Switch

## 2. Red Power Switch and Green Heater & Compressor Switch is lit but the Status LED lights on the front are not lit

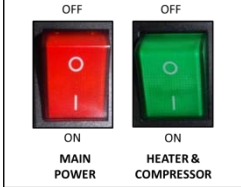
Possible Reason	Solution
Bad Transformer	Replace Transformer
Black Power Connector to the PCB is not properly connected	Properly connect.
Bad Front PCB	Replace Front PCB
Defective Green Heater & Compressor Switch	Replace Green Heater & Compressor Switch

## 3. Compressor Runs but Does Not Chill

Possible Reason	Solution
Condenser is dirty	Clean the condensing coil of any obstructions or dust.
Reduction of airflow into unit.	Make sure unit is not under minimum ventilation requirements (2 to 4 inches of clearance around the unit for heat exchange).
Compressor is running very hot (over 150°F)	Low or lost refrigerant. Refrigerant recharge as necessary. See Specifications for refrigerant charge data.



#### 4. Compressor is Not Running

Possible Reason	Solution
<p>Red Power and Green Heater &amp; Compressor Switch in the O = OFF position</p>	<p>Turn Green Heater &amp; Compressor Switch on. <i>I = ON</i></p> 
<p>Cold Thermostat is Faulty</p>	<p>Isolate Power and remove red leads from cold thermostat to check continuity. Thermostat should be closed if sensor is at room temperature. Check for continuity. Replace thermostat</p>
<p>Compressor Starting Circuit Faulty or Over Heated (tripped)</p>	<p>Turn Green Heater &amp; Compressor Switch off. <i>O = OFF.</i></p> <p>Remove the compressor cap on side of the compressor;</p> <p>Disconnect the black and red terminal connectors;</p> <p>Inspect the starter and overload relay for any defects.</p> <p>Check with Multi-Meter to ensure 120V AC is being supplied to the compressor starter. Turn ON Red Power and Green Heater &amp; Compressor Switch with meter hooked to red and black compressor leads.</p> <p>Replace components(s) as needed.</p>

## **DISPENSE TROUBLESHOOTING INDEX**

1. Irregular / Intermittent Dispensing from One Side
  2. Hot Water Intermittently Forced Out Through the Faucet, or a Dual Stream Out of the Faucet
  3. Dispensing won't stop when not holding the Dispensing Button
  4. Steady Drip out of Faucet
  5. Hot Water or Steam coming out of both the Faucet and the Vent Hole
  6. Hot Water coming out of Faucet Vent Hole
  7. Low Flow of Water
  8. Hot Water Drip out of Faucet
  9. Dispenses Hot and Cold Water at the same time
  10. No cold water available
  11. Water does not dispense from unit
  12. No Water is Dispensing from One Side – Cold or Hot
  13. Cold Water dispenses from Faucet and Vent Outlet Simultaneously
  14. Small amount of water periodically dispenses from faucet automatically
  15. Dispense Buttons Stick
  16. Water Stream is at an Angle
  17. Run-On - Water continues to dispense out of faucet after releasing the dispense button
- *Also includes related instruction for Hot Tank Descaling*

## 1. Irregular / Intermittent Dispensing from One Side

Possible Reason	Solution
Too much water pressure. Recommend 40 to 60 psi for the <b>WL380 Water Treatment System</b> to operate properly.	Check water pressure at the inlet bulkhead with an accurate water pressure gauge.  Additional method of verification is to turn off water to unit and press the dispense button. Does the solenoid open without water pressure to the unit? Listen for solenoid to activate, not button "click".  REGULATE input Water Pressure to 40-60 psi.
Loose or bad connection on the Front Dispensing PCB or Solenoid Connector	Check that they are connected properly and tightened.
Solenoid	If both the Water Pressure and PCB have been ruled out, then it is the Solenoid.  Replace Solenoid.
Dispensing button is broken on PCB	Check PCB for loose or damaged button. Replace PCB as necessary.

## 2. Hot Water Intermittently Forced Out Through the Faucet, or a Dual Stream Out of the Faucet

Possible Reason	Solution
Mineral deposits on the expansion slot inside the hot tank vent chamber which blocks the normal path of water to expand.	Descale Hot Tank  <b><u>See Hot Tank Descaling Instructions that are included further below in this Troubleshooting Section.</u></b>

### 3. Dispensing Won't Stop When Not Holding the Dispensing Button

Possible Reason	Solution
Bad Display PCB	Replace Main PCB
Debris in the Solenoid	Inspect Solenoid for debris and clean out as needed.
Damaged or Faulty Solenoid	Replace Solenoid.

### 4. Steady Drip Out of Faucet

Possible Reason	Solution
Debris in Solenoid	Inspect Solenoid for debris and clean out as needed.

### 5. Hot Water or Steam Coming out of both the Faucet and Vent Hole

Possible Reason	Solution
Improper tubing attachment from the Hot Tank to Faucet or vice versa.	Check that the tubing is connected from Hot Tank Outlets to correct Faucet attachments. Connect tubing to outlets as needed.

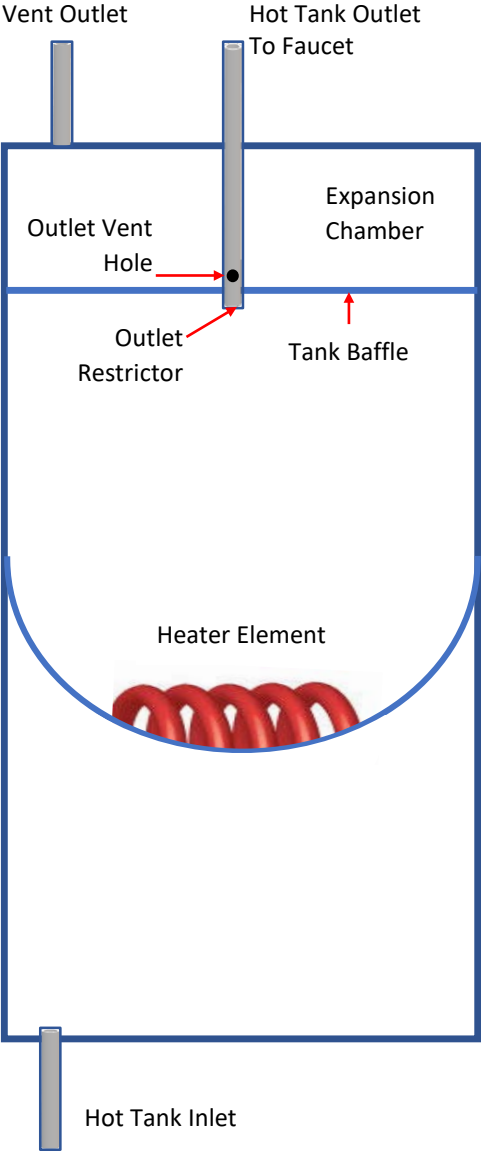
## 6. Hot Water Coming out of Faucet Vent Hole

Possible Reason	Solution
Improper tubing attachment from the tank to faucet or vice versa.	Verify tubing is connected properly from tank outlets to correct faucet attachments.
Hot Tank outlet hole is scaled over.	<p>Inspect and Descale Tank as needed.</p> <p><b><u>See Hot Tank Descaling Instructions that are included further below in this Troubleshooting Section.</u></b></p> <p>See instructional video on the Partner Area of the Waterlogic.com website for more information.</p>
Expansion chamber is not sealed properly.	Replace the Hot Tank.

## 7. Low Flow of Water – Rated Service Flow is 1.89 Liters (0.5 gallons) per Minute

Possible Reason	Solution
Determine Flow of Water	Rated Flow Rate is 1.89 Liters (0.5 gallons) per minute. Check flow rate by dispensing into a container to measure for one minute. Measure the amount of water that has been dispensed.
Feed Lines too Small	Feed lines can restrict flow if run long distances from the supply. It may be necessary to increase the supply line (e.g., use 3/8" feed line vs. 1/4").
Elbows and turns in the feed line	Minimize elbows and turns in the feed line.
Filters	Filters with high pressure drop due to fouling or just by design. Change filters more frequently or go to higher micron size filter for local water conditions.
Restrictions	Follow flow path to ensure there are no undiscovered restrictions due to debris or malfunctioning valves, including the supply valve at the source.
Booster Pump	Add a booster pump to the supply line if the feed is slower than needed.


## 9. Hot Water Drip out of Faucet

Possible Reason	Solution
<p>Small Outlet Vent Hole susceptible to scale build up.</p>	<p>Descale Tank.</p> <p><b><u>See Hot Tank Descaling Instructions that are included further below in this Troubleshooting Section.</u></b></p> <p>See instructional video on the Partner Area of the Waterlogic.com website for more information.</p>
	<p>All <b>Waterlogic</b> Hot Tanks have a built-in Vent or Expansion Chamber in the top of the tank except for WL270 (GF) units.</p> <p>The Vent Chamber allows for expansion of the water when it is heated.</p> <p>The chambers are separated by a welded-in tank baffle.</p> <p>Water always flows into the bottom of the Hot Tank and out the top to the Faucet.</p> <p>The Hot Tank Outlet Tube has a Restrictor in its base. This ensures the reservoir is always full by allowing more water in than out.</p> <p>There is a small hole in the side of the Hot Tank Outlet Tube that allows air and water to pass into the Vent Chamber as it is heated.</p> <p>Water in the Vent Chamber is suctioned back through the Outlet Tube vent hole when water is dispensed.</p> <p>Expansion of water as it is heated in the Reservoir will push the water out the faucet when the outlet tube vent hole becomes plugged with debris or scale.</p> <p>The small Outlet Vent Hole is susceptible to scale build up and is a key indicator that descaling is required.</p> <p>It is critical to descale the Hot Tank through the vent line and outlet line on a regular basis to prevent this problem.</p> <p>Descaling through the inlet and/or outlet lines only will not clean the vent chamber and outlet vent hole properly.</p>

## 9. Dispenses Hot and Cold Water at the same time

Possible Reason	Solution
Hot or Cold solenoid is stuck open.	<p>Remove Top Cover.</p> <p>Check Hot Solenoid: Dispense cold water and visually inspect tubing for water flow from both tanks.</p> <p>Check Cold Solenoid: Disconnect Elbow from outlet of Cold Solenoid. Select hot water and dispense (quickly releasing Dispensing Button to avoid much water coming out of Cold Solenoid.</p> <p>Replace Solenoid as necessary.</p>

## 10. No Cold Water Available

Possible Reason	Solution
Closed Water Supply Valve	Open the Water Supply Valve
Cold Water Solenoid Valve malfunction	Inspect the valve components for proper functionality.
Green Heater & Compressor Switch on unit is off.	<p>Turn Green Heater &amp; Compressor Switch on. I = ON</p> 
Loose connection(s) on the Display PCB	<p>Turn power off; unplug the <b>WL380 Water Treatment System</b> and visually inspect solenoid connections into the Display PCB. Verify the soldering points on connections are secure into the board.</p> <p>Remove the PCB to inspect the front of the board.</p>
Exhausted Filter	Replace filters as needed.

## 11. Water does not dispense from Unit

Possible Reason	Solution
Closed water supply valve	Open the water supply valve.
The unit is not properly plugged into electrical outlet	Check electrical outlet connection, or for blown circuit breaker.
Green Heater & Compressor Switch button on unit is in the off position	Turn Green Heater & Compressor Switch on. <i>I = ON</i>
15 Amp Fuse Blown	Replace the 15 Amp Fuse as needed.
Water is present in the Bottom Tray, causing the Leak Detection to trigger	Remove the Top Cover and Front Panel. Tip the unit slightly to drain, dry Bottom Tray completely.
Hot and Cold Solenoid connections into the Displace PCB are loose.	Turn power off; unplug the <b>WL380 Water Treatment System</b> and visually inspect Solenoid connections into the Display PCB. Verify the soldering points on connections are secure into the board.  Remove the PCB to inspect the front of the board.
Exhausted Filter	Replace filters as needed.





## 12. No Water is Dispensing from One Side – Cold or Hot

Possible Reason	Solution
<p>Too much water pressure.</p> <p>Recommend 40 to 60 psi for the <b>WL380 Water Treatment System</b> to operate properly.</p>	<p>Verify water pressure at the Inlet Bulkhead with a Pressure Regulator.</p> <p>Additional method of verification is to turn off water to unit and press the Dispense Button. Does the Solenoid open without water pressure to the unit? Listen for solenoid to activate, not the Dispense Button “click”.</p> <p>Adjust water pressure to 40-60 psi.</p>
PCB	<p>Switch the hot and cold wires on PCB (red and blue connections).</p> <p>If water now dispenses from the opposite side, this is an indication that there is a PCB problem.</p> <p>Replace PCB</p>
Solenoid	<p>If both the Water Pressure and PCB have been ruled out, then it is the Solenoid.</p> <p>Replace Solenoid.</p>
See <u>“Green Flashing Light” Fault Code Section of this Manual</u>	Indicates the Firewall UV system is not detecting adequate dose of UV to ensure safe water.

## 13. Cold Water Dispenses from Faucet and Vent Outlet Simultaneously

Possible Reason	Solution
Improper tubing attachment from the Cold Tank to Faucet or vice versa	Verify tubing is connected properly from Cold Tank Outlets to correct Faucet attachments.
Scale has formed inside Cold Tank outlet tube.	Remove Cold Water Outlet Tube from Cold Tank to Faucet. Pour some scale remover into Cold Tank.
Expansion chamber in Cold Tank is not sealed properly.	Replace Cold Tank.

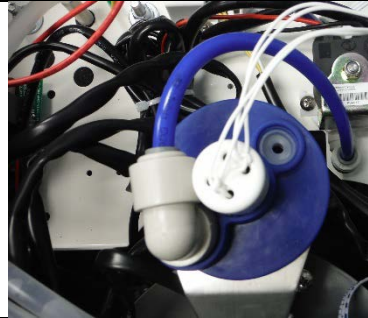
#### 14. Small Amount of Water Periodically Dispenses from Faucet Automatically

Possible Reason	Solution
Cold or Hot Water solenoid valve malfunction	Inspect valve components for proper function. Replace as necessary.
Obstruction in solenoid housing is preventing proper sealing of component.	Pre-determine whether water being dispensed is hot or cold.  Isolate the water supply; push the DISPENSE button to release the line pressure, and remove the coil affixed to the solenoid stem.  Remove the stem from the solenoid housing and allow water from the tank to flush out the contaminant(s).

#### 15. Dispense Buttons Stick

Possible Reason	Solution
Dirt or Foreign material is filling the gap around the Dispense Buttons.	Inspect the Dispense Buttons and clean surrounding area. Inspect Faucet Assembly inside the <b>WL380 Water Treatment System</b> and clean as necessary.

#### 16. Water Streams at an Angle

	Solution
	Rotate the Bung (Blue Silicone) and the JG fittings a few degrees.
Water Feed Pressure	Verify the Incoming Feed with a Pressure Regulator. Should be 40-60 psi (275-414 kPa) – Use Pressure Regulator
Outgoing Flow Rate	Verify the outgoing Flow Rate. Should be 1.89 Liters per minute (0.5 gallons per minute) - Firewall Purification.  Dispense water for one minute – should measure 1.89 Liters (0.5 gallons) per minute  Change Flow Restrictor if needed.

## **17. Run On – Water continues to dispense out of faucet after releasing the dispense button**

### **Reason**

“Run On” or “Carry On” is present in all Waterlogic pressure fed units without outlet solenoids.

“Run On” is defined as the amount of water that continues to dispense out of the faucet after releasing the dispense button.

Run On exists because the tanks pressurize as water is being dispensed. Every Waterlogic tank has an outlet restrictor to ensure the tanks remain full of water and water is controlled as it is released to the faucet. The inlet solenoid controls flow into the tanks. The tanks will “depressurize” once the dispense button is released the inlet solenoid closes. A small amount of water will “Run On” through the faucet as the tank depressurizes to atmospheric conditions.

Typical “Run On” is 2-3 seconds.

**“Run On” can be reduced by installing a pressure limiting device.**

The amount of inlet or supply pressure directly impacts the amount of “Run On” as quantified below.

WLCP Lab Testing of Run on 7-31-2013

Pressure	Pressure	Time	Flow Rate	Run On
Static PSI	Dynamic PSI	4 Liters	l/min	Seconds
68	40	61	2.9508197	3
50	30	72	2.5	2.5
32	20	92	1.956217	2
Pressure measured at inlet line to unit. Static with unit closed. Dynamic with unit dispensing cold water.				
No filters were installed in unit.				

## **HOT TANK DESCALING INSTRUCTIONS**

The Hot Tank requires removal of mineral deposits (descaling) on a regular basis. Typically descaling should take place every 6 to 12 months to preserve the long-term health of your unit.

Use non-toxic cleaner such as ScaleKleen, DEZCAL, 20% Citric Acid Solution, or Undiluted Vinegar Solution to remove mineral deposits as directed by the manufacturer depending upon filtration and local water conditions.

Descaling is an important process that removes calcium deposits, or scale, that can build up inside a tank over time. Calcium and scale is non-toxic but left unattended will hinder your unit's performance.

**⚠️ WARNING!** **PERSONAL PROTECTIVE EQUIPMENT REQUIRED.** *Always ensure proper ventilation and use rubber or nitrile gloves and eye protection when using chemicals. Refer to Material Safety Data Sheet for specific requirements of each product.*

**⚠️ CAUTION!** **STAINLESS STEEL TANK DESCALING.**

*The Hot Tank is made from stainless steel. Ensure descaling solution is compatible with stainless and always flush the unit completely. Dispose in an environmentally safe manner.*

### **Materials Needed:**

- Personal Protective Equipment. Rubber or Nitrile Safety Gloves and Protective Eyewear
  - Phillips Screwdriver
  - Temperature Gauge
  - Water Pitcher or Container to collect water from the faucet
  - 19 Liter (5 gallon) container or drain basin
  - Citric Acid Based Cleaner
  - ¼" Plastic Tubing, at least 4 feet in length, and assorted ¼" quick connect fittings
  - Sanitizing Cartridge
  - Food Coloring
1. Put descaler per directions and 3 drops of food coloring into the descaling cartridge.
  2. Connect descaling cartridge to the inlet water supply and connect to Inlet Bulkhead Fitting on the back of the **WL380 Water Treatment System**. Turn on Water Supply.
  3. Select Hot Water and depress the Main Dispensing Button on the Front Control Panel until descaling solution (colored water) comes out of the faucet. Container and drain basin will be required to catch water from the faucet.
  4. Turn off water supply and remove sanitizing cartridge from inlet water supply. Reconnect water supply to inlet fitting.

5. Allow descaling solution to remain in the Hot Tank for 15 minutes (length of time may vary depending on water conditions).
6. Place a pitcher, catch basin or other container under the faucet of the **WL380 Water Treatment System**.
7. Flush the Hot Tank until water runs clear.
8. Once clear Water dispenses from the faucet the Hot Tank has been descaled. Always ensure the **WL380 Water Treatment System** is performing to the customer's satisfaction.

**⚠ WARNING! HOT WATER. HOT WATER. Unit produces Hot Water in excess of 80°C (175°F). Water above 52°C (125°F) can cause severe burns or scalding. Keep unauthorized people and children away from the unit to avoid accidental dispensing of hot water.**

**⚠ CAUTION! MUST REPLACE HOT TANK 3-5 YEARS DEPENDING ON USAGE. The Hot Tank and its controls must be replaced a minimum of every three to five years to ensure efficient and dependable operation.**

**⚠ WARNING! REINSTALL ALL PANELS AND COVERS. Always reinstall all Panels, Protective Covers, and Fasteners after servicing equipment. Failure to do so could result in severe personal injury and will void the certifications and warranty of the equipment.**


*For additional information and updates visit <http://techportal.waterlogic.com>*

*Contact Waterlogic for assistance or help finding an authorized service representative.*

## COLD WATER TROUBLESHOOTING INDEX

### 1. Cold Water is not Cold 5°± -15°C (41°± 5°F)

#### 1. Cold Water is not Cold 5°± -15°C (41°± 5°F)

Possible Reason	Solution
No power to refrigeration system	Check Green Heater & Compressor switch is on. Turn Green Heater & Compressor Switch on. <i>I = ON</i> 
Tank has run out of cold water.  <i>Cold tank capacity is 4 liters (1 Gallon)</i>	Wait for Cold Tank to chill water to temperature prior to dispensing more cold water.  Greater capacity <b>Waterlogic Water Treatment Systems</b> are available.
Cold Water Thermostat	Check continuity of Thermostat with multimeter. Replace Thermostat as required.
Refrigerant has run out	Run Compressor for at least ten minutes. If Condenser is not warm, then refill the refrigerant.
Compressor problem	If Compressor is not running, repair or replacement is needed.

**Note:** The Waterlogic Firewall reduces 7-log of waterborne bacteria, 5-log of viruses, and 4-log of parasites potentially found in the drinking water. A small amount (about 2-ounces) of water remains in the Firewall device after dispensing. This water does not remain permanently chilled, and will eventually become room temperature after several hours. To ensure the next glass of water dispensed is adequately chilled, Waterlogic recommends dispensing one 5-ounce or more cup of water after long periods of inactivity. The first 2-ounces will be near room temperature, and the remaining 3+ ounces will be very cold. The mixture of these two temperatures will provide for an adequately refreshing, cold drink.

## HOT WATER TROUBLESHOOTING INDEX


### 1. Hot Water is not Hot 87°± 5°C (189°± 15°F)

*Also includes related instructions for:*

- *Disabling Energy Star Sleep Mode*
- *Resetting the Hot Tank Overload or High Safety Limit*

### **1. Hot Water is not Hot 87°C± 5°C (189°F ± 15°F)**

The Hot temperature set point is 87°± 5°C (189°± 15°F) and is controlled by a Thermostat on the side of the tank. There is a resettable Overload or High Limit Safety above the Thermostat on the side of the Hot Tank that will trip to prevent damage to the unit if the Hot Tank is dry heated (turned on without water in it). It typically takes 10 minutes for the 500W to heat the 1.6 Liter of room temperature (ambient) water to the 189°F set point.

Possible Reason	Solution
Is unit in Energy Star Sleep Mode?	<p>If no water has been dispensed for 3 or more hours, unit goes into sleep mode. Dispense hot water, wait 5 minutes, check temperature.</p> <p>If unit still does not heat proceed to “No power to heater elements” below.</p> <p><b><u>*If unit does not heat but you would like to Disable Energy Star Sleep Mode - see instructions included further below in this Troubleshooting Section.</u></b></p>
No Power	<p>Check that the Green Heater &amp; Compressor switch is on.</p> <p>Turn Green Heater &amp; Compressor Switch on.</p> <p><i>I = ON</i></p> 
Overload Tripped <i>Overload is a safety feature to ensure the tank does not overheat.</i>	<p>Overload will “click” when pushed. The overload is automatically reset when pressed.</p> <p><b><u>*See Overload Reset Instructions that are included further below in this Troubleshooting Section.</u></b></p>
Thermostat or overload “open” on Hot Tank	<p>Turn Power off. Check OHM’s resistance across terminals on each Thermostat and Overload separately.</p> <p>Good components will indicate a closed circuit or zero OHM’s on the meter.</p> <p>Replace components as necessary.</p>
Heating Coil Not Heating	<p>Turn Power off; Drain hot tank; Use multi-meter to check Heater Element for approximately 26 OHM’s resistance.</p> <p>Hot Tank must be empty if you are checking for continuity.</p> <p>Replace Hot Tank as necessary.</p>
Loose or improperly connected wire(s) to the Heating Element / Hot Tank.	<p>Visually inspect wire leads going to the hot tank; confirm proper connections to the heating elements.</p> <p>Hot tank life is expected to be 3-5 years, depending on usage.</p>

## DISABLING ENERGY SAVING SLEEP MODE

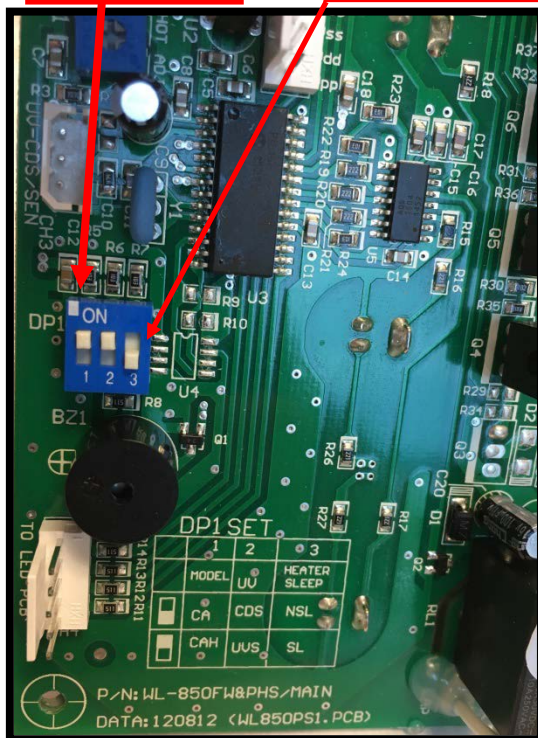
All **WL380 Water Treatment Systems** come from the factory with Energy Saving Sleep Mode enabled to meet the Energy Star Certification requirements. Energy Saving Sleep Mode disables the heater circuit if the unit has not been used for a continuous 3-hour period.

Selecting any button "wakes up" the **WL380 Water Treatment System** and turns the heater circuit back on. The hot tank will typically take less than 10 minutes to heat the water from ambient to the 87°C (189°F) set point.

Unplug Power Cord and remove Top Cover to access front Printed Circuit Board (PCB). Pin 3 on Dip Switch 1 (DP1) controls Energy Saver or Heater Sleep Mode on the WL380.

**Dip Switch 1  
(DP1)**

**Energy Saver (Heater Sleep) is controlled by Pin 3  
Shown in below in the lower NSL (No Sleep) Position  
= Energy Saver OFF = Heater Enabled All the Time**



### Energy Saver Mode (Heater Sleep)

Unit comes set with **energy saver or heater sleep mode enabled (SL)**. Heater will be disabled after 3 hours of machine inactivity (no icons selected). Turn Energy Saver off by moving pin 3 on DP1 located on front printed circuit board (PCB) to the down NSL (No Sleep) position.




**Ensure DP1 Pin 1 is up in the CAH position or heater will be disabled.**

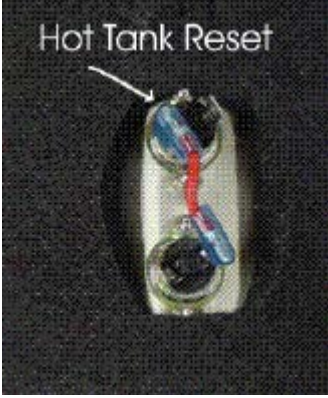



### Cold, Ambient, Hot (CAH) or Cold, Ambient (CA)

WL380 hot water function can be disabled and the unit converted from a **Cold, Ambient, Hot, Extra-Hot (CHA)** to a Cold and Ambient (CA) only by moving pin 1 on dip switch 1 (DP1) located on front printed circuit board (PCB) to CA position.



## RESETTING THE HOT TANK OVERLOAD OR HIGH LIMIT SAFETY

1.	<p>Green Compressor/Heater Switch must be in the <i>O=OFF</i> position</p> <div style="text-align: right;">  </div>
2.	<p>Unplug the Power Cord from rear of unit.</p>
3.	<p>Remove the Lower Front Panel of unit by removing the Phillips head screws underneath the Lower Front Panel.</p>
4.	<p>Locate the Protective Metal Box on the rear of the hot tank. As you look through the condenser coils on the rear of the unit, you will see the Hot Tank located on the right-hand side.</p> <div style="text-align: right;">  </div>
5.	<p>From the front of the Water Treatment System, reach up behind the hot tank and take hold of the protective metal box covering the thermostat and overload on the hot tank.</p> <p>There are nuts that secure the Protective Metal Box to the Hot Tank, which are loose enough to allow you to remove the Protective Metal Box.</p> <p>If the nuts on the metal box are too tight, loosen the nuts securing the Hot Tank to the upper base of the <b>WL380 Water Treatment System</b> unit and lower the Hot Tank so you can remove the Protective Metal Box.</p> <div style="text-align: right;">  </div>

6.	<p>For demonstrative purposes, photos below have lowered the Hot Tank from the <b>WL380 Water Treatment System</b>.</p> <p>Press the reset button</p> 	
7.	<p>Reattach the Protective Metal Box by depressing the top flap of the Protective Metal Box so it snaps back into its original position on the hot tank.</p>	
8.	Replace the Lower Front Panel.	
9.	Plug in the Power Cord.	
10.	<p>Turn on the Green Compressor/Heater Switch <i>I=ON</i> position</p> <p><b>The Hot and Cold tanks must be filled with water BEFORE turning on the Green Heater and Compressor Switch.</b></p>	
11.	Verify the cooler is fully operational before installing it at the customers' site.	

## TASTE AND ODOR TROUBLESHOOTING INDEX

### 1. Water Taste and/or Odor Issue

#### 1. Water Taste and/or Odor Issue

Possible Reason	Solution
All Temperatures	Check Filtration. Sanitize Unit.

**Note:** Taste can be subjective. A change from reverse osmosis to filtered water can be detected and may cause a taste complaint. Sometimes a blind taste test can be beneficial to determine if there may be prejudice with unit. The container may be imparting taste. Ensure a clean glass is being used to sample the water. Laboratory testing is available to determine exact constitution of specific taste and/or odor sources.